

I control CO period management

Process: [Monthly costing and cost accounting closing](#)

Responsibility area: Manage Costing Periods

ALL the periods from 2010 forward, should be opened/managed by /n/FIN3/OKP1_BK for PF2 system (Controlling Area: CHEF) and WP2 system (Controlling Areas in WP1: Z001, Z006, Z013, Z025, Z026, Z028).

Scope

WW

Frequency

According with closing calendar

References

- [OP.049](#)
- [OP.049](#)

Attachments

N/A

xx << I control CO period management >> xx

Guideline

After the closing period, we need to close previous period in order to prevent late postings to be performed.

Sometimes there is the need to correct something in the past periods and CO periods need to be opened and closed again. We should use /N/FIN3/OKP1_BK to lock/unlock CO transactions for a specific company code for any given period.

Business Transactions	
CP PA	Actual Process Assessment [CPP5]
RKIU	Actual Overhead Assessment [KSU5]
RKIV	Actual Overhead Distribution [KSV5]
RKIB	Actual Periodic Repostings [KSW5]
RKL	Actual Activity Allocation [KSC5] [KB21N] [KB21]
KA ZI	Actual Cost Center Accrual [KSA3]
KSIO	Actual Cost Center Split [KSS2]
KPIV	Actual Cost Distrib. Cost Obj. [KKPX]
RKIL	Actual Inverse Activity Alloc. [KSC5]
RKN	Actual Non-alloc. Activities [KB51N]
KZ PI	Actual Overhead (periodic) [KGI2]

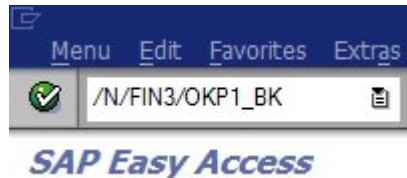
KSII	Actual Price Calculation [KSII]
KO AO	Actual Settlement [KO88] [KO8G] [CJ8G]
RK LT	Actual Template Allocation [KPAS]
KS PA	Assessment to CO-PA [KEU5]
KA BG	Automat. WIP/Results Analysis
COIN	CO Through-postings from FI [FB50] [FB01]
KT DA	COPA: TOP-DOWN: Actuals [KE28]
KA ZO	Down Payment [F-29]
RKS	Enter Statistical Key Figures [KB31N]
KA BM	Manual WIP/Results Analysis [KKA1]
KA MV	Manual Cost Allocation [KB15N]
RK LX	Predistribution of Fixed Costs [KSFX]
RK U3	Repost CO Line Items [KB61]
RK U1	Repost Costs [KB11N]
RK U2	Repost Revenue [KB41N]
RK LN	Revaluation at Actual Price [KON1]
RRIB	Seg. Adjust.: Act.Per.Repost. [KISR]
RRIU	Segment Adjust.: Act. Assess. [KISR]
RRIV	Segment Adjust.: Act. Distrib. [KISR]
RK WD	Target=Actual Activity Allocation [KNMA]
KV AR	Variance Calculation [KKS2]
KZ RI	Interest calculation (actual)
KR AT	LIS transfer : actual SKF
KE FC	CO-PA External Data Transfer
KE27	COPA Periodic valuation
KE21	CO-PA Line Item Entry
KB21	CO-PA Activity Allocation
CP AE	CO-PA Template Allocation
Business Transactions	

PRC	Activity backflush
KOR1	PS incoming orders: auto determination
KFPI	Transfer price allocation
JVIV	JV Actual distribution
JVIU	JV Actual assessment

STEP 1

Start the transaction using the transaction code

With /N/FIN3/OKP1_BK it is possible to lock CO transactions for a specific company code for any given period.



STEP 2

Fill fields:

- Controlling area:** WP1, check [Rules - CO structure](#) and PF1 is CHEF
- Fiscal year:** current year
Note - Fiscal year: Normally this will be the same as the calendar year. However, a company could have a fiscal year that is different from a calendar year. In either case, you will enter the appropriate year that reflects the current fiscal year.
- Company code:** select the company code or several company codes
- Version:** There are 2 main scenarios: one for Actual and other for Plan.
 - Actual: For Actual periods
 - Plan: For Plan periods, this will be the plan version to be unlocked or locked. Plan versions are noted below. Usually it will be either "0" or "1".

Click on "version" to open this window

Change Period Lock : Initial Screen

Actual Lock all act. Plan Lock all plan

CO Area ☒ Rhodia Europe

Fiscal Year ☒

Type of objects to select ☒ Company Code

Object to select

or group

Version ☒

Vsn	Actual	Plan	Version Description
0	☒	☒	Plan/actual version
1	☐	☒	Plan version: for PO
2	☐	☒	Plan version: change 2
3	☐	☒	Actual costs vs. MATY
10	☐	☒	
100	☐	☒	Plan version 100
110	☐	☒	PS: forecast version
111	☐	☒	PS: forecast version revised
112	☐	☒	PS: forecast version final
FIF	☐	☒	Plan ver. for est. comm. price
R00	☐	☒	Copy of act tax based px calc

i The period lock or unlock can be used in various ways, please find the examples below

We will lock all business transactions in companies ZFR3 and ZFR9 in period 02/2014

1. **Controlling area:** Z006
2. **Fiscal year:** 2014
3. **Company code:** Select the companies you want to lock
4. **Version:** 0

To select the companies, you click on



1. Press the button « multiple selection » and
2. Flag the companies you wish to lock

3. Press the



Change Period Lock : Initial Screen

Actual Lock all act. Plan Lock all plan

CO Area	☒	Rhodia Europe
Fiscal Year	☒	
Type of objects to select	Company Code	
Object to select		
or group		
Version	☒	

Change Period Lock : Initial Screen

Actual Lock all act. Plan Lock all plan

Multiple Selection by Field

Field: Company Code

Multiple Entry	
O. Fr. Value	To Value
	
	
	
	
	
	

Number of Selection Criteria

Company Code (1) 29 Entries found		
Restrictions		
Co.	Company Name	Crcy
☐	6111 Solvay P&S GmbH	EUR
☐	6268 Solvay Advanced Silicas	PLN
☐	6337 ZZZZ exRhodia IndYarns as	SKK
☐	6388 ZZZZ ex Rhodia Pharma Sol	GBP
☐	6391 Rhodia Pharma Sol	GBP
☐	6592 ZZZZ Rhodia Geronazzo Spa	EUR
☐	6771 Rhodia Holdings Limited	GBP
☐	7294 ZZZZ ex Rhodia Portugal	EUR
☐	7486 ZZZZ ex Rhodia Food Ltd	GBP
☐	7527 ZZZZ exRhodia IndusYarnsS	LVL
☐	7735 Solvay Istanbul Kimya	TRY
☐	7781 Rhodia Limited	GBP
☐	8090 Solvay Solutions Italia	EUR
☐	8206 Rhodia Pinax Limited	GBP
☐	8442 ZZZZ exRhodia IndusYarnsA	CHF
☐	8485 Solvay Solutions España	EUR
☒	ZFR3 Rhodia Operations	EUR
☒	ZFR9 Butachimie	EUR

29 Entries found

Change Period Lock : Initial Screen

Actual Lock all act. Plan Lock all plan

Multiple Selection by Field

Field: Company Code

Multiple Entry	
O. Fr. Value	To Value
	
	
	
	
	
	

Number of Selection Criteria

Press the button « Lock all act. »

Change Period Lock : Initial Screen

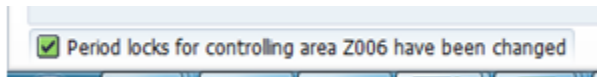
Actual **Lock all act.** Plan Lock all plan

CO Area	2006	☐ Rhodia Europe
Fiscal Year	2014	
Type of objects to select	Company Code	
Object to select	ZFR3	Go
or group		
Version	0	

Inform the period you want to entire block

And enter

You will have this message :



All actual business transactions in period 02/2014 were blocked in companies ZFR3 and ZFR9.

Change Period Lock : Initial Screen

Actual Lock all act. Plan Lock all plan

CO Area	Z006	Rhodia E
Fiscal Year	2014	
Type of objects to select	Company Code	
Object to select	ZFR3	
or group		
Version	0	

Change Period Lock : Initial Screen

Posting period **02**

☐ ☐

You can check if the locking was done for those companies.

Display Actual Period Lock : Edit

CO Area: 2006 Rhodia Europe
Fiscal Year: 2014
Type of objects to select: Company Code
Object to select: ZFR3 Display selection
Group Name:

Transaction	01	02	03	04	05	06	07
Actual cost distrib. cost obj.	☒	☐	☐	☐	☐	☐	☐
Actual inverse activity alloc.	☒	☐	☐	☐	☐	☐	☐
Actual non-alloc. activities	☒	☐	☐	☐	☐	☐	☐
Actual overhead (periodic)	☒	☐	☐	☐	☐	☐	☐
Actual price calculation	☒	☐	☐	☐	☐	☐	☐
Actual settlement	☒	☐	☐	☐	☐	☐	☐
Actual template allocation	☒	☐	☐	☐	☐	☐	☐
Assessment to CO-PA	☒	☐	☐	☐	☐	☐	☐
Automat. WIP/results analysis	☒	☐	☐	☐	☐	☐	☐
CO Through-postings from FI	☒	☐	☐	☐	☐	☐	☐
COPA: TOP-DOWN: Actuals	☒	☐	☐	☐	☐	☐	☐
Down payment	☒	☐	☐	☐	☐	☐	☐
Enter statistical key figures	☒	☐	☐	☐	☐	☐	☐
Interest calculation (actual)	☒	☐	☐	☐	☐	☐	☐
Manual WIP/results analysis	☒	☐	☐	☐	☐	☐	☐
Manual cost allocation	☒	☐	☐	☐	☐	☐	☐
Predistribution of fixed costs	☒	☐	☐	☐	☐	☐	☐
Repost CO line items	☒	☐	☐	☐	☐	☐	☐
Repost costs	☒	☐	☐	☐	☐	☐	☐
Repost revenue	☒	☐	☐	☐	☐	☐	☐
Revaluation at actual price	☒	☐	☐	☐	☐	☐	☐
Seg. adjust.: Act.per.repost.	☒	☐	☐	☐	☐	☐	☐
Segment adjust.: Act. Assess.	☒	☐	☐	☐	☐	☐	☐
Segment adjust.: Act. distrib.	☒	☐	☐	☐	☐	☐	☐
Target=actual acty allocation	☒	☐	☐	☐	☐	☐	☐
Variance calculation	☒	☐	☐	☐	☐	☐	☐

Display Actual Period Lock : Edit

BUYR	Name
FR3	Rhodia Opérations
FR9	Butachimie

We are locking a certain business transaction in month 03/2014 in the companies selected previously

1. **Controlling area:** Z006
2. **Fiscal year:** 2014
3. **Company code:** Select the companies you want to lock
4. **Version:** 0

Press the button « Actual »



When you select « Actual » only actual transactions are visible.

When you select « Plan » only plan transactions are visible.

Please make your choice before you will select the business transactions

Change Period Lock : Initial Screen

Actual	Lock all act.	Plan	Lock all plan
--------	---------------	------	---------------

CO Area	2006	☐ India Europe
Fiscal Year	2014	
Type of objects to select	Company Code	
Object to select	ZFR3	
or group		
Version	0	

You can flag the transaction you want to lock in the period and save

In the example we are locking all postings in CO from FI in month 03/2014 in the companies select previously

Change Actual Period Lock : Edit

Lock Period Lock Transaction Unlock Period Unlock Transaction

CO Area: Rhodia Europe
 Fiscal Year:
 Type of objects to select:
 Object to select: Display selection
 Group Name:

Transaction	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
ABC Actual process assessment	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual Overhead Assessment	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual Overhead Distribution	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual Periodic Repostings	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual activity allocation	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual cost center accrual	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual cost center split	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual cost distrib. cost obj.	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual inverse activity alloc.	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual non-alloc. activities	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual overhead (periodic)	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual price calculation	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual settlement	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual template allocation	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Assessment to CO-PA	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Automat. WIP/results analysis	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
CO Through-postings from FI	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
COPA: TOP-DOWN: Actuals	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Down payment	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Enter statistical key figures	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Interest calculation (actual)	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Manual WIP/results analysis	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Manual cost allocation	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Predistribution of fixed costs	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Repost CO line items	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Repost costs	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

If you select one business transaction and press the button « lock transaction »

The business transaction will be locked in all periods in the companies previously selected

i The button “unlock transaction” is used in the same way, to unlock one business transaction in all periods

Change Actual Period Lock : Edit

Lock Period **Lock Transaction** Unlock Period Unlock Transaction

CO Area: 2006 Rhodia Europe
 Fiscal Year: 2014
 Type of objects to select: Company Code
 Object to select: ZFR3 Display selection
 Group Name:

Transaction	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
ABC Actual process assessment	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual Overhead Assessment	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual Overhead Distribution	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual Periodic Repostings	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual activity allocation	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual cost center accrual	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual cost center split	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual cost distrib. cost obj.	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual inverse activity alloc.	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual non-alloc. activities	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual overhead (periodic)	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual price calculation	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual settlement	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Actual template allocation	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Assessment to CO-PA	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Automat. WIP/results analysis	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
CO Through-postings from FI	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
COPA: TOP-DOWN: Actuals	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Down payment	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Enter statistical key figures	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Interest calculation (actual)	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Manual WIP/results analysis	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Manual cost allocation	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Predistribution of fixed costs	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Repost CO line items	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Repost costs	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

If you select one period and press the button « lock period »

All business transactions will be locked in this period in the companies previously selected



The button "unlock period" is used in the same way, to unlock one period

Change Actual Period Lock : Edit

CO Area: 2006 Rhodia Europe
 Fiscal Year: 2014
 Type of objects to select: Company Code
 Object to select: ZFR3
 Group Name:

Transaction	01	2	03	4	05	06	07	08	09	10	11	12	13	14	15	16
ABC Actual process assessment	✓	✓	✓													
Actual Overhead Assessment	✓	✓	✓													
Actual Overhead Distribution	✓	✓	✓													
Actual Periodic Repostings	✓	✓	✓													
Actual activity allocation	✓	✓	✓													
Actual cost center accrual	✓	✓	✓													
Actual cost center split	✓	✓	✓													
Actual cost distrib. cost obj.	✓	✓	✓													
Actual inverse activity alloc.	✓	✓	✓													
Actual non-alloc. activities	✓	✓	✓													
Actual overhead (periodic)	✓	✓	✓													
Actual price calculation	✓	✓	✓													
Actual settlement	✓	✓	✓													
Actual template allocation	✓	✓	✓													
Assessment to CO-PA	✓	✓	✓													
Automat. WIP/results analysis	✓	✓	✓													
CO Through-postings from FI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
COPA: TOP-DOWN: Actuals	✓	✓	✓													
Down payment	✓	✓	✓													
Enter statistical key figures	✓	✓	✓													
Interest calculation (actual)	✓	✓	✓													
Manual WIP/results analysis	✓	✓	✓													
Manual cost allocation	✓	✓	✓													
Predistribution of fixed costs	✓	✓	✓													
Repost CO line items	✓	✓	✓													
Repost costs	✓	✓	✓													



Some considerations

- You only could work with group of companies in the lock and unlock transaction once all companies in the group have the same status.
- In case you have opened or closed any single company code and you can NOT maintain any entered group of company codes, you may get the following message /Fin3/KBAS_MSG001 :



Multiple maintenance not possible due to different lock entries.

- The system is not allowed to update group of companies that don't have the same status of lock/unlock in business transactions.

To restore now the consistency, you have the option to lock all the entered company codes (or group) for a specific period at the same time.

Change Period Lock : Initial Screen

Actual

Lock all act.

Plan

Lock all plan

CO Area

2006

Rhodia Europe

Fiscal Year

2014

Type of objects to select

Company Code

Object to select

or group

Version

0

Multiple Selection by Field

Field: B0903

Comp

Multiple Entry

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

2024

2025

2026

2027

2028

2029

2030

2031

2032

2033

2034

2035

2036

2037

2038

2039

2040

2041

2042

2043

2044

2045

2046

2047

2048

2049

2050

2051

2052

2053

2054

2055

2056

2057

2058

2059

2060

2061

2062

2063

2064

2065

2066

2067

2068

2069

2070

2071

2072

2073

2074

2075

2076

2077

2078

2079

2080

2081

2082

2083

2084

2085

2086

2087

2088

2089

2090

2091

2092

2093

2094

2095

2096

2097

2098

2099

2100

2101

2102

2103

2104

2105

2106

2107

2108

2109

2110

2111

2112

2113

2114

2115

2116

2117

2118

2119

2120

2121

2122

2123

2124

2125

2126

2127

2128

2129

2130

2131

2132

2133

2134

2135

2136

2137

2138

2139

2140

2141

2142

2143

2144

2145

2146

2147

2148

2149

2150

2151

2152

2153

2154

2155

2156

2157

2158

2159

2160

2161

2162

2163

2164

2165

2166

2167

2168

2169

2170

2171

2172

2173

2174

2175

2176

2177

2178

2179

2180

2181

2182

2183

2184

2185

2186

2187

2188

2189

2190

2191

2192

2193

2194

2195

2196

2197

2198

2199

2200

2201

2202

2203

2204

2205

2206

2207

2208

2209

2210

2211

2212

2213

2214

2215

2216

2217

2218

2219

2220

2221

2222

2223

2224

2225

2226

2227

2228

2229

2230

2231

2232

2233

2234

2235

2236

2237

2238

2239

2240

2241

2242

2243

2244

2245

2246

2247

2248

2249

2250

2251

2252

2253

2254

2255

2256

2257

2258

2259

2260

2261

2262

2263

2264

2265

2266

2267

2268

2269

2270

2271

2272

2273

2274

2275

2276

2277

2278

2279

2280

2281

2282

2283

2284

2285

2286

2287

2288

2289

2290

2291

2292

2293

2294

2295

2296

2297

2298

2299

2300

2301

2302

2303

2304

2305

2306

2307

2308

2309

2310

2311

2312

2313

2314

2315

2316

2317

2318

2319

2320

2321

2322

2323

2324

2325

2326

2327

2328

2329

2330

2331

2332

2333

2334

2335

2336

2337

2338

2339

2340

2341

2342

2343

2344

2345

2346

2347

2348

2349

2350

2351

2352

2353

2354

2355

2356

2357

2358

2359

2360

2361

2362

2363

2364

2365

2366

2367

2368

2369

2370

2371

2372

2373

2374

2375

2376

2377

2378

2379

2380

2381

2382

2383

2384

2385

2386

2387

2388

2389

2390

2391

2392

2393

2394

2395

2396

2397

2398

2399

2400

2401

2402

2403

2404

2405

2406

2407

2408

2409

2410

2411

2412

2413

2414

2415

2416

2417

2418

2419

2420

2421

2422

2423

2424

2425

2426

2427

2428

2429

2430

2431

2432

2433

2434

2435

2436

2437

2438

2439

2440

2441

2442

2443

2444

2445

2446

2447

2448

2449

2450

2451

2452

2453

2454

2455

2456

2457

2458

2459

2460

2461

2462

2463

2464

2465

2466

2467

2468

2469

2470

2471

2472

2473

2474

2475

2476

2477

2478

2479

2480

2481

2482

2483

2484

2485

2486

2487

2488

2489

2490

2491

2492

2493

2494

2495

2496

2497

2498

2499

2500

2501

2502

2503

2504

2505

2506

2507

2508

2509

2510

2511

2512

2513

2514

2515

2516

2517

2518

2519

2520

2521

2522

2523

2524

2525

2526

2527

2528

2529

2530

2531

2532

2533

2534

2535

2536

2537

2538

2539

2540

2541

2542

2543

2544

2545

2546

2547

2548

2549

2550

2551

2552

2553

2554

2555

2556

2557

2558

2559

2560

2561

2562

2563

2564

2565

2566

2567

2568

2569

2570

2571

2572

2573

2574

2575

2576

2577

2578

2579

2580

2581

2582

2583

2584

2585

2586

2587

2588

2589

2590

2591

2592

2593

2594

2595

2596

2597

2598

2599

2600

2601

2602

2603

2604

2605

2606

2607

2608

2609

2610

2611

2612

2613

2614

2615

2616

2617

2618

2619

2620

2621

2622

2623

2624

2625

2626

2627

2628

2629

2630

2631

2632

2633

2634

2635

2636

2637

2638

2639

2640

2641

2642

2643

2644

2645

2646

2647

2648

2649

2650

2651

2652

2653

2654

2655

2656

2657

2658

2659

2660

2661

2662

2663

2664

2665

2666

2667

2668

2669

2670

2671

2672

2673

2674

2675

2676

2677

2678

2679

2680

2681

2682

2683

2684

2685

2686

2687

2688

2689

2690

2691

2692

2693

2694

2695

2696

2697

2698

2699

2700

2701

2702

2703

2704

2705

2706

2707

2708

2709

2710

2711

2712

2713

2714

2715

2716

2717

2718

2719

2720

2721

2722

2723

2724

2725

2726

2727

2728

2729

2730

2731

2732

2733

2734

2735

2736

2737

2738

2739

2740

2741

2742

2743

2744

2745

2746

2747

2748

2749

2750

2751

2752

2753

2754

2755

2756

2757

2758

2759

2760

2761

2762

2763

2764

2765

2766

2767

2768

2769

2770

2771

2772

2773

2774

2775

2776

2777

2778

2779

2780

2781

2782

2783

2784

2785

2786

2787

2788

2789

2790

2791

2792

2793

2794

2795

2796

2797

2798

2799

2800

2801

2802

2803

2804

2805

2806

2807

2808

2809

2810

2811

2812

2813

2814

2815

2816

2817

2818

2819

2820

2821

2822

2823

2824

2825

2826

2827

2828

2829

2830

2831

2832

2833

2834

2835

2836

2837

2838

2839

2840

2841

2842

2843

2844

2845

2846

2847

2848

2849

2850

2851

2852

2853

2854

2855

2856

2857

2858

2859

2860

2861

2862

2863

2864

2865

2866

2867

2868

2869

2870

2871

2872

2873

2874

2875

2876

2877

2878

2879

2880

2881

2882

2883

2884

2885

2886

2887

2888

2889

2890

2891

2892

2893

2894

2895

2896

2897

2898

2899

2900

2901

2902

2903

2904

2905

2906

2907

2908

2909

2910

2911

2912

2913

2914

2915

2916

2917

2918

2919

2920

2921

2922

2923

2924

2925

2926

2927

2928

2929

2930

2931

2932

2933

2934

2935

2936

2937

2938

2939

2940

2941

2942

2943

2944

2945

2946

2947

2948

2949

2950

2951

2952

2953

2954

2955

2956

2957

2958

2959

2960

2961

2962

2963

2964

2965

2966

2967

2968

2969

2970

2971

2972

2973

2974

2975

2976

2977

2978

2979

2980

2981

2982

2983

2984

2985

2986

2987

2988

2989

2990

2991

2992

2993

2994

2995

2996

2997

2998

2999

3000

3001

3002

3003

3004

3005

3006

3007

3008

3009

3010

3011

3012

3013

3014

3015

3016

3017

3018

3019

3020

3021

3022

3023

3024

3025

3026

3027

3028

3029

3030

3031

3032

3033

3034

3035

3036

3037

3038

3039

3040

3041

3042

3043

3044

3045

3046

3047

3048

3049

3050

3051

3052

3053

3054

3055

3056

3057

3058

3059

3060

3061

3062

3063

3064

3065

3066

3067

3068

3069

3070

3071

3072

3073

3074

3075

3076

3077

3078

3079

3080

3081

3082

3083

3084

3085

3086

3087

3088

3089

3090

3091

3092

3093

3094

3095

3096

3097

3098

3099

3100

3101

3102

3103

3104

3105

3106

3107

3108

3109

3110

3111

3112

3113

3114

3115

3116

3117

3118

3119

3120

3121

3122

3123

3124

3125

3126

3127

3128

3129

3130

3131

3132

3133

3134

3135

3136

3137

3138

3139

3140

3141

3142

3143

3144

3145

3146

3147

3148

3149

3150

3151

3152

3153

3154

3155

3156

3157

3158

3159

3160

3161

3162

3163

3164

3165

3166

3167

3168

3169

3170

3171

3172

3173

3174

3175

3176

3177

3178

3179

3180

3181

3182

3183

3184

3185

3186

3187

3188

3189

3190

3191

3192

3193

3194

3195

3196

3197

3198

3199

3200

3201

3202

3203

3204

3205

3206

3207

3208

3209

3210

3211

3212

3213

3214

3215

3216

3217

3218

3219

3220

3221

3222

3223

3224

3225

3226

3227

3228

3229

3230

3231

3232

3233

3234

3235

3236

3237

3238

3239

3240

3241

3242

3243

3244

3245

3246

3247

3248

3249

3250

3251

3252

3253

3254

3255

3256

3257

3258

3259

3260

3261

3262

3263

3264

3265

3266

3267

3268

3269

3270

3271

3272

3273

3274

3275

3276

3277

3278

3279

3280

3281

3282

3283

3284

3285

3286

3287

3288

3289

3290

3291

3292

3293

3294

3295

3296

3297

3298

3299

3300

3301

3302

3303

3304

3305

3306

3307

3308

3309

3310

3311

3312

3313

3314

3315

3316

3317

3318

3319

3320

3321

3322

3323

3324

3325

3326

3327

3328

3329

3330

3331

3332

3333

3334

3335

3336

3337

3338

3339

3340

3341

3342

3343

3344

3345

3346

3347

3348

33