import java.util.\*;

import java.text.\*;

import java.lang.Math;

/\*\* To implement date functionalities

\*/

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\*/

public class dateProg{

public static void Menu(int choice,Date d)

{ int ch=0;

while(ch!=8)

{

if(choice==1)

System.out.println("\n GET VALUES");

else

System.out.println("\n SET VALUES");

System.out.println("\nSUB MENU");

System.out.println("1. Day");

System.out.println("2. Date ");

System.out.println("3. Month");

System.out.println("4. Year");

System.out.println("5. Hours");

System.out.println("6. Minutes");

System.out.println("7. Seconds");

System.out.println("8. EXIT");

System.out.print("Your Choice Is : ");

Scanner in= new Scanner(System.in);

ch=in.nextInt();

switch(ch)

{

case 1: if(choice==1)

System.out.println("\nDay is : "+d.getDay());

else

{ int day;

System.out.print("\nEnter Day : ");

day=in.nextInt();

//d.setDay(day);

}

break;

case 2: if(choice==1)

System.out.println("\nDate is : "+d.getDate());

else

{ int date;

System.out.print("\nEnter Date : ");

date=in.nextInt();

d.setDate(date);

}

break;

case 3: if(choice==1)

System.out.println("\nMonth is : "+d.getMonth());

else

{ int mon;

System.out.print("\nEnter Month : ");

mon=in.nextInt();

d.setMonth(mon);

}

break;

case 4: if(choice==1)

System.out.println("\nYear is : "+(d.getYear()+1900));

else

{ int year;

System.out.print("\nEnter Year : ");

year=in.nextInt();

d.setYear(year);

}

break;

case 5: if(choice==1)

System.out.println("\nHours is : "+d.getHours());

else

{ int hours;

System.out.print("\nEnter Hours : ");

hours=in.nextInt();

d.setHours(hours);

}

break;

case 6: if(choice==1)

System.out.println("\nMinutes is : "+d.getMinutes());

else

{ int min;

System.out.print("\nEnter Minutes : ");

min=in.nextInt();

d.setMinutes(min);

}

break;

case 7: if(choice==1)

System.out.println("\nSeconds is : "+d.getSeconds());

else

{ int sec;

System.out.print("\nEnter Seconds : ");

sec=in.nextInt();

d.setSeconds(sec);

}

break;

}

}

}

/\*\* Static method representing the equals(),before(),after() and compareTo() functionalities of Date class

\* @param ch - equals/before/after/compareTo choice made

\* @return void

\*/

public static void main(String[] a)

{

int ch=0;

Date d = new Date();

while(ch!=6){

System.out.println("MENU");

System.out.println("1. Get Values ");

System.out.println("2. Set Values ");

System.out.println("3. Check equal ");

System.out.println("4. Check after ");

System.out.println("5. Check before ");

System.out.println("6. EXIT ");

System.out.println("Enter your choice :");

Scanner in=new Scanner(System.in);

ch=in.nextInt();

switch(ch)

{

case 1:

Menu(ch,d);

break;

case 2:

Menu(ch,d);

break;

case 3:

{

System.out.println("Enter the first date as (year, month, date) and time as (hours,minutes , seconds)");

int y=in.nextInt();

int m=in.nextInt();

int dat=in.nextInt();

int h=in.nextInt();

int min=in.nextInt();

int se=in.nextInt();

Date d1=new Date(y,m,dat,h,min,se);

System.out.println("Enter the second date as (year, month, date) and time as (hours,minutes , seconds)");

y=in.nextInt();

m=in.nextInt();

dat=in.nextInt();

h=in.nextInt();

min=in.nextInt();

se=in.nextInt();

Date d2=new Date(y,m,dat,h,min,se);

System.out.println(d2+" "+d1);

if(d2.equals(d1))

System.out.println("Two dates are equal");

else

System.out.println("Two dates are not equal");}

break;

case 4:

{

System.out.println("Enter the first date as (year, month, date) and time as (hours,minutes , seconds)");

int y=in.nextInt();

int m=in.nextInt();

int dat=in.nextInt();

int h=in.nextInt();

int min=in.nextInt();

int se=in.nextInt();

Date d1=new Date(y,m,dat,h,min,se);

System.out.println("Enter the second date as (year, month, date) and time as (hours,minutes , seconds)");

y=in.nextInt();

m=in.nextInt();

dat=in.nextInt();

h=in.nextInt();

min=in.nextInt();

se=in.nextInt();

Date d2=new Date(y,m,dat,h,min,se);

System.out.println(d1+" "+d2);

if(d1.after(d2))

System.out.println("Date1 comes after date2");

else

System.out.println("Date2 comes after date1");}

break;

case 5:

{

System.out.println("Enter the first date as (year, month, date) and time as (hours,minutes , seconds)");

int y=in.nextInt();

int m=in.nextInt();

int dat=in.nextInt();

int h=in.nextInt();

int min=in.nextInt();

int se=in.nextInt();

Date d1=new Date(y,m,dat,h,min,se);

System.out.println("Enter the second date as (year, month, date) and time as (hours,minutes , seconds)");

y=in.nextInt();

m=in.nextInt();

dat=in.nextInt();

h=in.nextInt();

min=in.nextInt();

se=in.nextInt();

Date d2=new Date(y,m,dat,h,min,se);

System.out.println(d1+" "+d2);

if(d1.before(d2))

System.out.println("Date1 comes before date2");

else

System.out.println("Date2 comes before date1");

break;

}

case 6:

break;

default: break;

}

}

}

}

SAMPLE INPUT AND OUTPUT:

Microsoft Windows [Version 6.1.7601]

Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\dell>cd..

C:\Users>cd..

C:\>cd java

C:\java>set path=%path%;C:\java\Java\jdk1.7.0\_21\bin

C:\java>javac dateProg.java

Note: dateProg.java uses or overrides a deprecated API.

Note: Recompile with -Xlint:deprecation for details.

C:\java>java dateProg

MENU

1. Get Values

2. Set Values

3. Check equal

4. Check after

5. Check before

6. EXIT

Enter your choice :

1

GET VALUES

SUB MENU

1. Day

2. Date

3. Month

4. Year

5. Hours

6. Minutes

7. Seconds

8. EXIT

Your Choice Is : 1

Day is : 0

GET VALUES

SUB MENU

1. Day

2. Date

3. Month

4. Year

5. Hours

6. Minutes

7. Seconds

8. EXIT

Your Choice Is : 2

Date is : 28

GET VALUES

SUB MENU

1. Day

2. Date

3. Month

4. Year

5. Hours

6. Minutes

7. Seconds

8. EXIT

Your Choice Is : 3

Month is : 6

GET VALUES

SUB MENU

1. Day

2. Date

3. Month

4. Year

5. Hours

6. Minutes

7. Seconds

8. EXIT

Your Choice Is : 4

Year is : 2013

GET VALUES

SUB MENU

1. Day

2. Date

3. Month

4. Year

5. Hours

6. Minutes

7. Seconds

8. EXIT

Your Choice Is : 5

Hours is : 12

GET VALUES

SUB MENU

1. Day

2. Date

3. Month

4. Year

5. Hours

6. Minutes

7. Seconds

8. EXIT

Your Choice Is : 8

MENU

1. Get Values

2. Set Values

3. Check equal

4. Check after

5. Check before

6. EXIT

Enter your choice :

3

Enter the first date as (year, month, date) and time as (hours,minutes , seconds

)

2013

2

1

3

4

5

Enter the second date as (year, month, date) and time as (hours,minutes , second

s)

2013

2

1

3

4

5

Sat Mar 01 03:04:05 IST 3913 Sat Mar 01 03:04:05 IST 3913

Two dates are equal

MENU

1. Get Values

2. Set Values

3. Check equal

4. Check after

5. Check before

6. EXIT

Enter your choice :

4

Enter the first date as (year, month, date) and time as (hours,minutes , seconds

)

1

1

2001

3

4

5

Enter the second date as (year, month, date) and time as (hours,minutes , second

s)

31

12

2001

2

3

4

Wed Jul 25 03:04:05 IST 1906 Wed Jun 23 02:03:04 IST 1937

Date2 comes after date1

MENU

1. Get Values

2. Set Values

3. Check equal

4. Check after

5. Check before

6. EXIT

Enter your choice :

5

Enter the first date as (year, month, date) and time as (hours,minutes , seconds

)

1

1

2001

0

0

0

Enter the second date as (year, month, date) and time as (hours,minutes , second

s)

31

12

2001

0

0

0

Wed Jul 25 00:00:00 IST 1906 Wed Jun 23 00:00:00 IST 1937

Date1 comes before date2

MENU

1. Get Values

2. Set Values

3. Check equal

4. Check after

5. Check before

6. EXIT

Enter your choice :

6

C:\java>