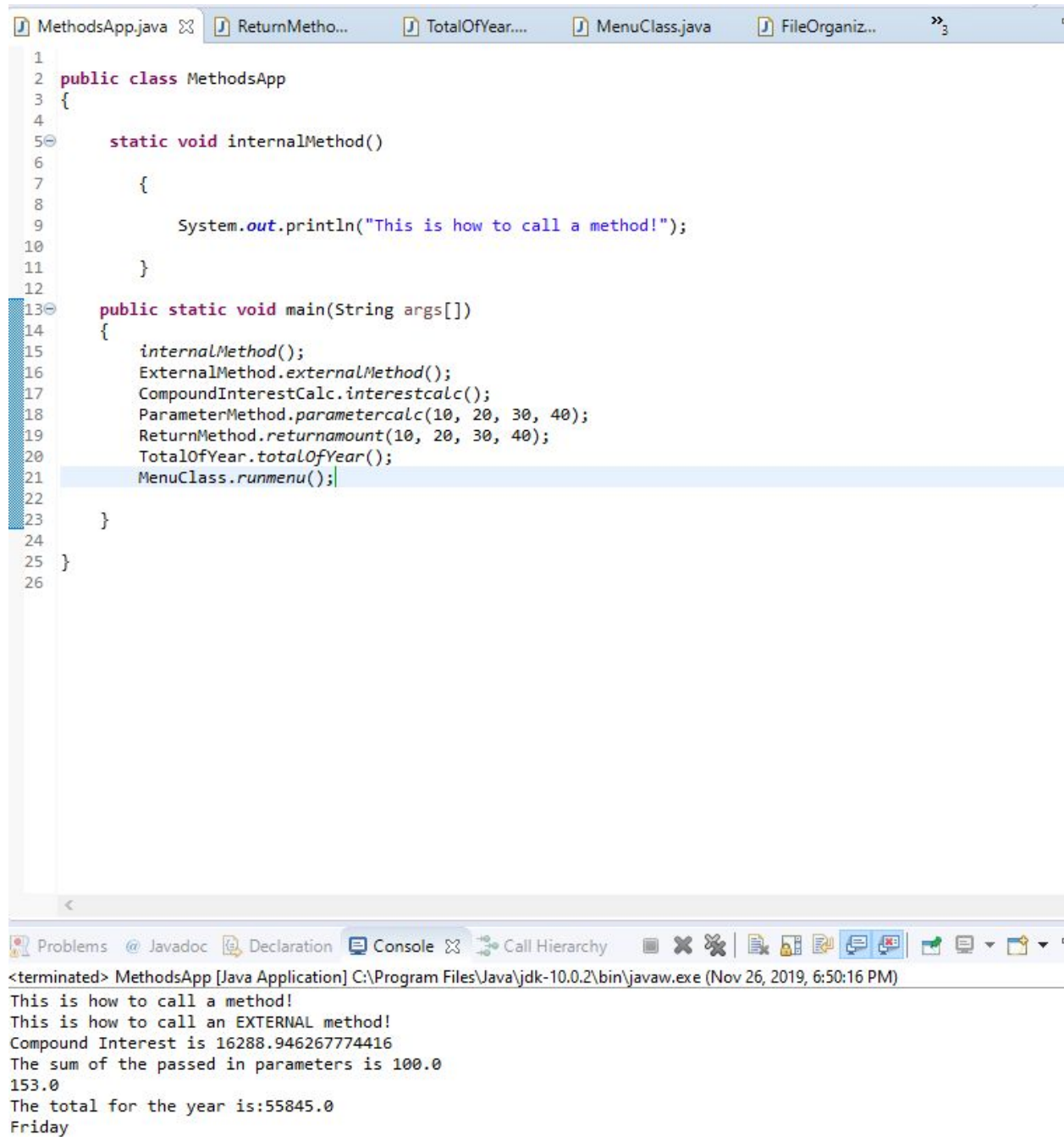


Michael Brower & Vitor Cavalcante

Programming Assignment 9:

Main Class for Calling External Methods:



```
1
2 public class MethodsApp
3 {
4
5     static void internalMethod()
6     {
7
8         System.out.println("This is how to call a method!");
9
10    }
11
12
13    public static void main(String args[])
14    {
15        internalMethod();
16        ExternalMethod.externalMethod();
17        CompoundInterestCalc.interestcalc();
18        ParameterMethod.parametercalc(10, 20, 30, 40);
19        ReturnMethod.returnamount(10, 20, 30, 40);
20        TotalOfYear.totalOfYear();
21        MenuClass.runmenu();
22    }
23 }
24
25
26
```

<terminated> MethodsApp [Java Application] C:\Program Files\Java\jdk-10.0.2\bin\javaw.exe (Nov 26, 2019, 6:50:16 PM)

This is how to call a method!

This is how to call an EXTERNAL method!

Compound Interest is 16288.946267774416

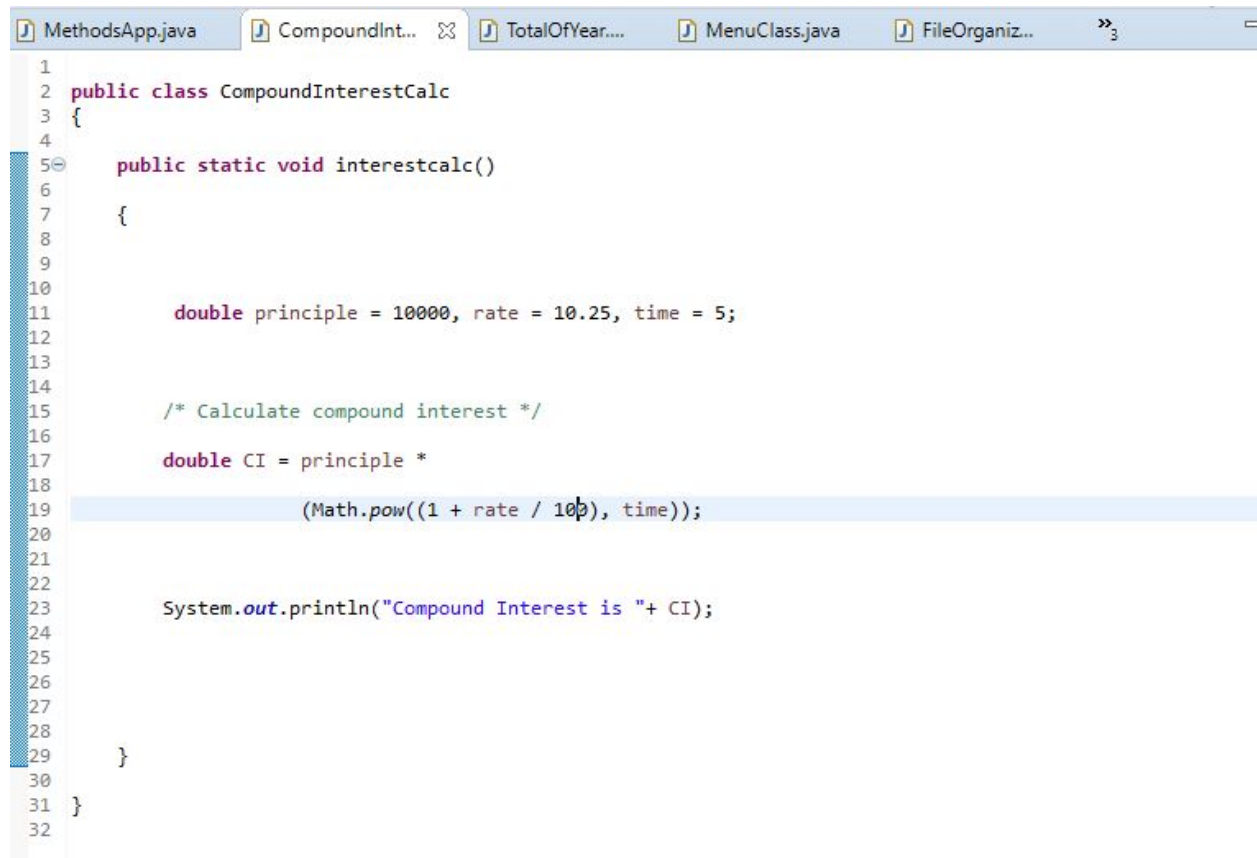
The sum of the passed in parameters is 100.0

153.0

The total for the year is:55845.0

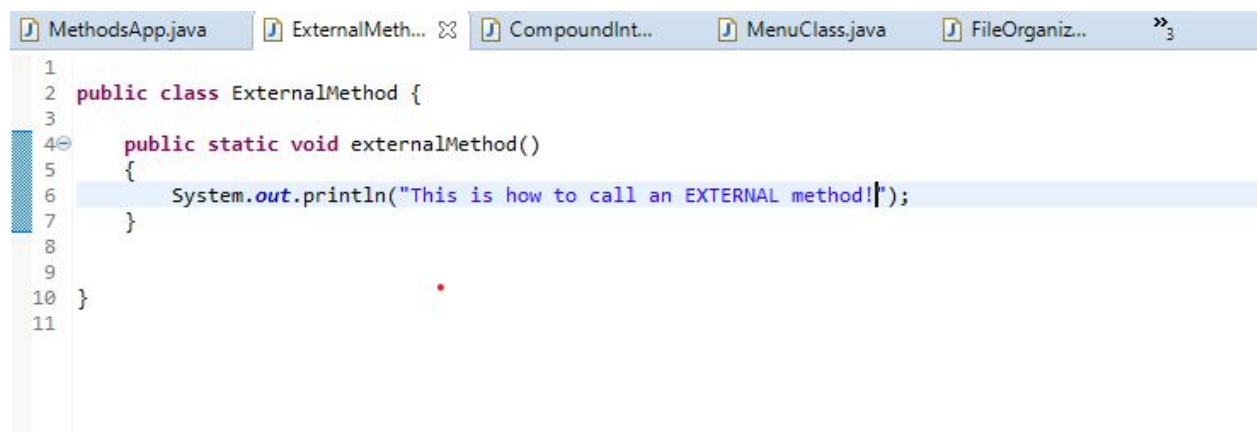
Friday

Calculate Interest Class:



```
1
2 public class CompoundInterestCalc
3 {
4
5     public static void interestcalc()
6     {
7
8
9
10
11         double principle = 10000, rate = 10.25, time = 5;
12
13
14         /* Calculate compound interest */
15
16         double CI = principle *
17             (Math.pow((1 + rate / 100), time));
18
19
20
21
22         System.out.println("Compound Interest is " + CI);
23
24
25
26
27
28     }
29 }
30
31
32
```

ExternalClass Class:



```
1
2 public class ExternalMethod {
3
4     public static void externalMethod()
5     {
6         System.out.println("This is how to call an EXTERNAL method!");
7     }
8
9
10 }
11
```

Parameter Method:

```
MethodsApp.java ExternalMeth... CompoundInt... ParameterMe... MenuClass.java »3
1
2 public class ParameterMethod
3 {
4
5 public static void parametercalc (int a, int b, double c, double d)
6
7 {
8
9
10
11 double total = a + b + c + d;
12
13
14
15 System.out.println("The sum of the passed in parameters is "+ total);
16
17
18
19
20
21 }
22
23 }
24
```

Return Method:

```
MethodsApp.java ExternalMeth... CompoundInt... ParameterMe... ReturnMetho... »3
1
2 public class ReturnMethod
3 {
4
5 static double returnamount (int a, int b, double c, double d)
6
7 {
8
9
10
11 double total = a + b + c + d;
12
13
14
15 return total;
16
17
18
19 }
20
21
22
```

Case Driven Menu:

```
public class MenuClass
{
    public static void runmenu(){

        int day = 5;

        String dayString;

        // switch statement with int data type

        switch (day) {

            case 1:

                dayString = "Monday";

                break;

            case 2:

                dayString = "Tuesday";

                break;

            case 3:

                dayString = "Wednesday";

                break;

            case 4:

                dayString = "Thursday";
```

```
break;
```

```
case 5:
```

```
    dayString = "Friday";
```

```
    break;
```

```
case 6:
```

```
    dayString = "Saturday";
```

```
    break;
```

```
case 7:
```

```
    dayString = "Sunday";
```

```
    break;
```

```
default:
```

```
    dayString = "Invalid day";
```

```
    break;
```

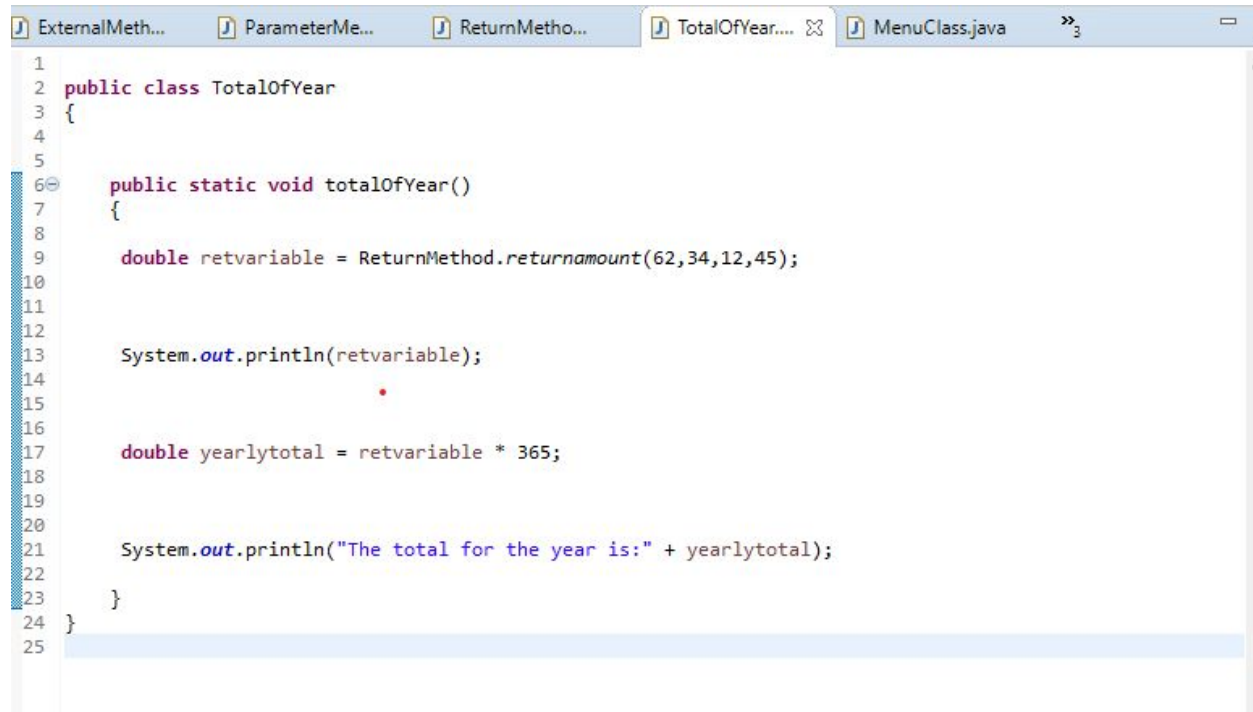
```
}
```

```
System.out.println(dayString);
```

```
}
```

```
}
```

Total of year:



```
1
2 public class TotalOfYear
3 {
4
5
6 public static void totalOfYear()
7 {
8
9     double retvariable = ReturnMethod.returnamount(62,34,12,45);
10
11
12
13     System.out.println(retvariable);
14
15
16
17     double yearlytotal = retvariable * 365;
18
19
20
21     System.out.println("The total for the year is:" + yearlytotal);
22
23 }
24 }
25
```