PPJ07

October 25, 2022

1 Problem 1

Write a program which reads five numbers of type int and prints the two greatest of them (which can be equal). You can define at most three variables of type int. Do not use loops or arrays.

2 Problem 2

Write a program which reads five numbers of type int and after reading the third, fourth and fifth prints the sum of three numbers last read. You can define at most three variables of type int. Do not use loops or arrays.

3 Problem 3

In the U.S.A., fuel consumption is measured in units called *mpg — miles per gallon*,i.e., how many miles you will be able to drive on one gallon of gasoline. In Europethe same quantity is measured in l/100km — how many litres you will use to drive 100 km.
One mile = 1.609344 km.
One gallon = 3.785412l.
Write a program which asks the user for fuel consumption, as a double, and units used, as a String: eu if this is in European units or usa otherwise. Then the corresponding fuel consumption in the other units is printed. If the string entered is not one of eu or usa, the program prints an error message. For example, a run of the program could look like this:

```
Enter fuel consumption and units ("eu" or "usa") 6.6 eu
6.6 l/100km = 35.63857526590168 mpg
```

Use switch statement, or, preferably, expression.

4 Problem 4

Write a program reading one real number (say,d) and the name of a geometrical figure

- "disc"–d is then interpreted as the radius of a disc;

- "triangle"–d is then interpreted as the side of a equilateral triangle;

- "square"–d is then interpreted as the side of a square;

- "rand"– the kind of figure is one of the above with equal probability (use **Math.random()**, which gives a number of type double in range[0,1)) and d is interpreted as above.

Use the switch expression to initialize a variable area the value of which is the area of the figure.