**FOP2 – Labs 1 and 2 Worksheet**

1. Write a program called *MySecondProgram* that should print to the screen the following two messages on 2 separate lines:

**This is my second attempt at programming in Java!**

**I already feel much more confident!**

For this exercise you must have 2 separate instructions that use the System.out.println statement. Save it into a file called MySecondProgram.java, compile it and then run it.

1. Write another program called *MyShop;* the program should declare and initialise variables to store the following: the number of pads in stock, the number of pens in stock, the price for a pad, the price for a pen, and the total value of the entire stock (pens and pads). Then use print statements to output the value of those variables, as well the total value of pads and the total value of pens; for instance, if my shop has 344 pads and 700 pens, and a pad costs 0.90, and a pen costs 0.25, the program should output the following:

**My shop has 344 pads, each pad costing 0.90 euro.**

**My shop has 700 pens, each pen costing 0.25 euro.**

**The total value of pads is 309.60 euro.**

**The total value of pens is 175 euro.**

**The total value of the entire stock is 484.60 euro.**

Save it into a file called *MyShop.java*, compile it and then run it.

1. Write a program *HelloName* that prompts the user to enter his/her name, takes input from the user and then prints a message back using the name inputted as follows:

**What’s your name? Dana**

**Hi Dana, nice to meet you!!**

Save it into a file called *HelloName.java*, compile it and then run it.

1. Write another program called *SumOfIntegers;* that takes 3 integers from the user and displays them and their sum all lined up to the right. For instance:

**Enter First number:3**

**Enter Second number:4**

**Enter Third number:5**

**First: 3**

**Second: 4**

**Third: 5**

**Sum: 12**

Save it into a file called *SumOfIntegers.java*, compile it and then run it.

1. Write a program called *WeeklyGrossPay* that allows a user to input the daily pay rate of an employee and the number of days per week, then it calculates the employee’s gross pay for the week. Your program must ensure that if the number of days exceeds 7 it print an error message and terminates. For instance:

**Enter daily pay rate: 123.45**

**Enter number of days: 3**

**Pay Rate: 123.45**

**Days Worked: 3**

**Gross pay for the week:370.35**

Save it into a file called *WeeklyGrossPay.java*, compile it and then run it.

1. Write a program called *ScoreKeeper* that keeps the scores of a game between 2 players. The program should take input for both scores (as whole numbers) and store them in 2 variables: score1 and score2, and, assuming that the player with the larger score wins, it should output one of the following “player 1 wins”, “player 2 wins”, or “it’s a tie”. The program should also check that the user enters inputs that can be interpreted as integers, otherwise should print and error and then terminate. Save it into a file called *ScoreKeeper.java,* compile it and then run it.
2. Write a program called *MaxOf3* that reads in 3 floating­point numbers from the user and (using 2 if statements) identifies the largest of the three inputs and then prints it. For example, if the user enters 4, 9, and 2.5, the program should output “The largest number is 9.0”. Save it into a file called *MaxOf3.java,* compile it and then run it.