Question 1

Write a single Java program that evaluates the **truth** or **falsity** of the following expressions using *System.out.println* statements as shown in the program output below. **NOTE:** you do not need to declare any variables. Do **NOT** use an if-statement. Name your program **Question1.java**

```
  i.   5 - 1 != 3
 ii.   100 % 50 == 0
iii.   (21 + 7) / 4 >= 100
```

```
5 - 1 != 3 is true
100 % 50 == 0 is true
(21 + 7) / 4 >= 100 is false
```

Question 2

Write a single Java program that declares two integer variables called x and y. Assign x = 4, y = 10 and write Boolean expressions that represent the statements below. Your program should output the results as shown below. Name your program **Question2.java**

```
a) x is an even number
b) x multiplied by 5 is less than 7 squared
c) y minus x is positive
d) y cubed is less than 100
```

```
x is an even number is true
x multiplied by 5 is less than 7 squared is true
y minus x is positive is true
y cubed is less than 100 is false
```

Question 3

Write a program to read a student's grade out of 100 from the keyboard. The program should print one of **PASS** or **FAIL**. A pass is any grade of 40% or higher. Name your program **Question3.java**

```
Enter grade: 21
FAILED
[StephenSheridan@Lpt-50017434 solutions % java Question3.java
Enter grade: 41
PASSED
StephenSheridan@Lpt-50017434 solutions %
```

Question 4

Write a program to read a month number and print its month name. For example an input of 10 would result in an output of October. Name your program **Question4.java**

```
Enter month number: 10
October
```

Deliverables

Place all your files in a folder called **Week3** and upload the zip file using the Week3 upload link for your group on MOODLE. Please check the deadline for your group on MOODLE.

Plagiarism

This assessment should be an individual piece of work. Any evidence of plagiarism will result in a grade of zero for all parties involved and will trigger the Universities plagiarism policy 3AS08 (see course coordination page).