In-Class Participation Week 1 Thursday

Q1) Write a program to accept the percentage for COMP1020 from the user and assign grades using an **if-else** ladder. Write comments to explain your code.

[1M]

Percentage	Grade
90 and above	A
80 to 89	B
70 to 79	C
60 to 69	D
Below 60	F

Input: Enter percentage: 91

Output: Your grade is: A

Input: Enter percentage: 49

Output: Your grade is: F

Q2) What is the output for the program given below?   **[1M]**

```java
public class Q2
{
  public static void main(String[] args) {
  int i = 3;
  System.out.printf("%d %d %d %n", i++, i++, i++);
  System.out.printf("%d %d", ++i, i++ + ++i);
  }
}
```

Q3) The main function accepts 4 numbers from the user. These numbers are provided to the following average() function that calculates and returns the average of four numbers: **[1M]**

float average (float x1, float x2, float x3, float x4)

Q4) Write a program to accept a number from the user and check the Amstrong number or not. **[2M]**

"An Armstrong number is a number such that the sum of its digits raised to the third power is equal to the number itself."

For example,

153 is an Armstrong number, since

1*1*1 + 5*5*5 + 3*3*3 = 153.

Input: Enter a number: 153

Output: 153 is an Amstrong number.

Input: Enter a number: 123

Output: 123 is not an Amstrong number.