

# Review Questions

## Conditionals

Q1. Define a function `largest_of_three` that takes three integer parameters `a`, `b` and `c` and returns the largest of them.

In the main program, take `a`, `b` and `c` as input on separate lines and call the function inside a print statement.

Sample Input 1:

```
17
300
-99
```

Sample Output 1:

```
300
```

Sample Input 2:

```
0
0
-1
```

Sample Output 2:

```
0
```

Q2. One of your courses requires that your project files are named exactly (with proper capitalisation) to be autograded. The project name must be “ThinkPython” and the name of your first report must be “review1.tex”, the second “report2.tex”, and so on.

Write a function named `will_my_report_be_checked` that takes no parameters and instead takes `project_name`, `report_name`, and `report_num` as input, where `report_num` denotes which report it is. Check whether the project name and report name are appropriate and print “Yes” if valid and “No” if invalid.

In the main program call the function `will_my_report_be_checked`.

Sample Input 1:

```
ThinkPython
report23.tex
23
```

Sample Output 1:

```
Yes
```

Sample Input 2:

```
Easy A+
Review3.tex
17
```

Sample Output 2:

```
No
```

Q3. Your university follows the grading scheme below.

Marks	Grade	Grade Points
[90, 100]	A+	4.00
[80, 90)	A	3.25
[70, 80)	B	2.50
[60, 70)	C	1.75
[50, 60)	D	1.00
[0, 50)	F	0.00

Write a function named `gpa_calculator` that takes marks for 3 different subjects as `marks_1`, `marks_2`, `marks_3` on three different lines and outputs the corresponding grades along with the cumulative GPA (arithmetic mean of the Grade Points of each subject) to 2 decimal places.

If a value above 100 or below 0 is entered for the marks, print “Error in Data Entry!” (after inputting all the marks) and stop.

The main program should call the `gpa_calculator` function.

Sample Input 1:

```
100
77
30
```

Sample Output 1:

```
A+ B F
2.17
```

Sample Input 2:

```
0
-1
420
```

Sample Output 2:

```
Error in Data Entry!
```

Q4. Two lawyers decide to partner up to open up a new law firm. All is going well, but they're struggling on deciding upon the name of the firm. They consult you and you suggest writing the names as per alphabetical order with a double underline. So if the lawyer's names are Bob and Charles, the outputted name should be as follows:

```
Bob, Charles & Associates
=====
```

However, they suggest an amendment. If the name of the person alphabetically first is longer than the others, then there should be a single underline like in the case:

```
Bobby, Carl & Associates
-----
```

Write a function `name_of_firm` that takes the 2 names as parameters and returns the appropriate law firm name.

In the main program, take `name_1` and `name_2` as input and call the function inside a print statement.