Conditionals

Exercise 1:
1. Write a program that asks the user for:
   - Which country they live in
   - Which subject is their favourite
   - What is their age
   - What is their favourite colour
   - What is their height (in cm)

Exercise 2:

1. If the user lives in China, print "You live in China". Otherwise print "You live outside China"

2. If the user's favourite subject is maths, print "You like maths!". If the favourite subject is "English", print "You like English!". If the favourite subject is "Chinese", print "You like Chinese!". Otherwise, print "You like something else

3. If the users age is above 10, print "you are older than a decade". If the users age is below 10, print "you are younger than a decade". Otherwise print "You are 10!"

4. If the user's favourite colour is blue, print "You like Blue things". If the user's favourite colour is red, print "You like Red things". If the user's favourite colour is green, print "You like Green things". Otherwise, print "You like other colours of things!".

5. If the user's height is over 130cm, print "You can go on the fast ride!". If the user's height is 130cm or less, print "You cannot go on the fast ride, sorry!".

For Loops

Exercises:

1. Write a loop that prints all the letters of your name on different lines

2. Write a loop that prints all the letters of this list ['a', 'g', 'd', 'h']

3. Write a loop that prints 'Welcome to Python Class', 7 times

4. Write a loop that prints out the letters of the longest word you can think of

5. Write a loop that adds all the numbers in the list [1,2,3,4,5]

6. Write a loop that prints 'You are the best python programmer in the world' as many times as you want

7. Write a loop that prints the words from the list ['Hello', 'You', 'Are', 'is']

8. Write a loop that multiplies all the numbers in the list [3,7,8]

Functions

Exercises – Functions

1. Write a function called do_twice(f) that runs a function f two times

2. Write a function called maximum_number that finds the biggest of three numbers a,b and c

3. Write a function called sum_list that adds all the numbers in a list

4. Write a function called is_vowel(a) that checks if a is a vowel

5. Write a function called print_vowels that print all the vowels in a string

6. Write a function in_range(a, low, high) that returns true if a is in the range given and false otherwise

7. Write a function called minimum_number that finds the smallest of three numbers a,b and c

8. Write a function called multiply_list that multiplies all the numbers in a list

9. Write a function called right_justify that takes a string named s as a parameter and prints the string with enough leading spaces so that the last letter of the string is in column 70 of the display:

```
6
7
8    right_justify("Hello human")

In [4]: runcell(0, 'C:/Mark/uni/Tutoring/Python/Classes/Week 9 - Review/Before Class/During Lesson
Code.py')
                                                            Hello human
```

10. Write a function called factorial that prints the factorial of a given number