

Lab Sheet-2

Conditional statements

1. Generate a random number between 0 and 9. If the number generated is a multiple of three display message "multiple of 3" otherwise display "not a multiple of 3".
[Use a random.randint() function to get a random integer number from the **inclusive range**. For example, random.randint(0, 10) will return a random number from [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]. import random to import random module in python]

2. Write a Python program to read a number between 1 and 7 and print the corresponding weekday. For example, if the user input is 1, then output Monday, if the input is 2, then print Tuesday etc.

3. Write a Python program to read three numbers x, y, z, and print them in the increasing order.
4. Consider the following if statement.

```
if age < 18:  
    print ('kid')  
else:  
    print ('Adult')
```

This can be written in a short form as follows. `print('Kid' if age < 18 else 'Adult')`

This short code is a type of **Ternary operator**. (ternary operator -an operator that acts on three operands)

Syntax : <expression 1> if <condition> else <expression 2>

Read a number and print whether it is positive or negative using short code mentioned above.

5. Write a program to accept a positive integer. Check if the number is "near to" multiple of 10. A number x is said to be "near to" another number y(which is any multiple of 10)if difference between x and y is <=2.
Example :- Let x=12, x is "near to" multiple of 10, x=19 is "near to" multiple of 10, x=15 not "near to" multiple of 10.
6. Amrita likes to play badminton whenever she gets tired after watching her online classes. But because it is very hot, she can play outside only after 4pm till 6pm. But on cloudy days she can play outside from 3 pm onwards. Write a program to accept the start, end times and a Boolean variable is_cloudy (to denote whether the climate is cloudy or not) and print whether Amrita can play outside during this time.
7. Write a program in python to simulate rock, paper, scissor game. Take choices of two players as input. Following figure shows the rules of the game.

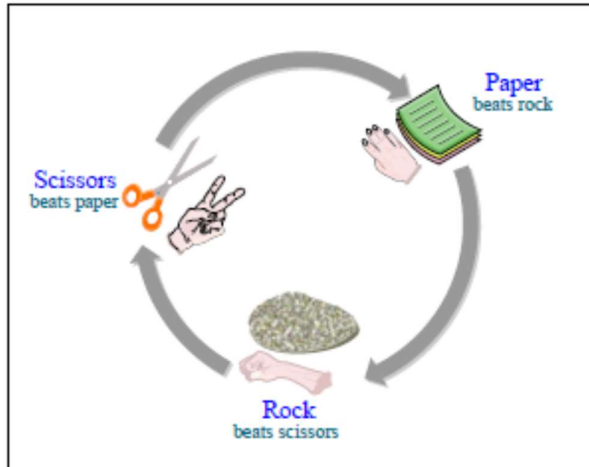


Image by MIT OpenCourseWare.

8. Write a python program to input basic salary of an employee and calculate its Gross salary according to following:

Basic Salary \leq 10000 : HRA = 20%, DA = 10%

Basic Salary \leq 20000 : HRA = 25%, DA = 15%

Basic Salary $>$ 20000 : HRA = 30%, DA = 20%