

While loop : student challenge #1

Q) Display multiplication table for a given number

#We have a number and for that we have to print a multiplication table, as the pattern for multiplying is same we are using while loop here.

```
n = 5 # given number is 5
counter = 1 # starting counter from one( 5 * 1 = 5)
while counter <= 10: # condition of while is ,the counter value should be <= 10
    print(n, 'x', counter, '=', n * counter) # displaying multiplication table of given number
    counter = counter + 1 # increase value of counter
```

Output :

```
/Users/abdulbari1/Pycharm
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

If you want take the number as input from the user then you can write the same program as

```
n = int(input('enter a number for multiplication table : ')) # TAKING INPUT FROM THE USER
counter = 1 # starting counter from one( 5 * 1 = 5)
while counter <= 10: # condition of while is ,the counter value should be <= 10
    print(n, 'x', counter, '=', n * counter) # displaying multiplication table of given number
    counter = counter + 1 # increase value of counter
```

Output :

```
/Users/abdulbari1/PycharmProjects/pythonprograms/
enter a number for multiplication table : 7
7 x 1 = 7
7 x 2 = 14
7 x 3 = 21
7 x 4 = 28
7 x 5 = 35
7 x 6 = 42
7 x 7 = 49
7 x 8 = 56
7 x 9 = 63
7 x 10 = 70
```