

The For Loop – “Repeating Code”

```
# For loop examples
```

```
# control c will interrupt execution of code
```

```
# count from 1 to 10  
for i in range(1,11):  
    print ("i is equal to",i)
```

```
# count from start to stop
```

```
print()
```

```
start=1  
stop=10
```

```
for i in range(start,stop+1):  
    print ("i is equal to",i)
```

```
# count from 10 to 100 in steps of 10
```

```
print()  
start = 10  
stop = 100
```

```
for i in range(start,stop+1,10):  
    print ("i is equal to",i)
```

```
#count backwards
```

```
print()  
start = 10  
stop = 1
```

```
for i in range(start,stop-1,-1):  
    print ("i is equal to",i)
```

```
#count from 0 to -1000 in steps of -100
```

```
print()  
start = 0  
stop = -1000
```

```
for i in range(start,stop-1,-100):  
    print ("i is equal to",i)
```

```
# sum all numbers between 1 and 1000
```

```
print()  
start = 0  
stop = 1000000 #one million  
sum = 0
```

```
for i in range(start,stop+1):  
    sum+=i  
print ("The sum of numbers between 1 and one million is",sum)
```

```
# exit loop using break
```

```
start = 0  
stop = 1000
```

```
for i in range(start,stop+1):
```

```
    print ("i=",i)  
    if i==7:  
        print("loop stopped at 7")  
        break
```

Programs of the Day

1. Have the user enter a starting and ending value.

Output the count and running total between these values

2. Output the following table of squares and cubes

<u>Number</u>	<u>Square</u>	<u>Cube</u>
---------------	---------------	-------------

1	1	1
---	---	---

2	4	8
---	---	---

...

10	1000	1000
----	------	------

3. Output all multiples of 13 between 13 and 1300, and the sum of these multiples

4. Have the user enter their name and a number, n.

Output Hello "name" , n times