

```
In [21]: #string selection from start point to the given end point  
title = 'Amazing'  
print(title[0:5])
```

Amazi

```
In [17]: #entire string with start point but no end reference  
title = 'Amazing'  
print(title[2:])
```

azing

```
In [18]: #entire string with no start reference but with end point  
title = 'Amazing'  
print(title[:5])
```

Amazi

```
In [27]: #string with start reference and dynamic end point  
title = 'Amazing'  
print(title[2:-2])
```

azi

```
In [20]: #variable copy and print  
title = 'Amazing'  
Category = title[:]  
print(Category)
```

Amazing

```
In [29]: #variable methods upper/lower  
title = 'Amazing'  
print(title.lower())
```

amazing

```
In [42]: # fuction produces text in proper case"  
title = 'Amazing Day'  
print('title'.title())
```

Title

```
In [30]: #variable methods replace  
title = 'Amazing'  
print(title.replace('Amazing', 'Amazing Day'))
```

Amazing Day

```
In [33]: #variable methods find returns index of the length  
title = 'Amazing Day'  
print(title.find('ing'))
```

4

```
In [41]: # produces boolean value "true or false"  
title = 'Amazing Day'  
print('Day' in title)
```

True

```
In [43]: #Operators division returns float  
print(10 / 3)
```

3.3333333333333335

```
In [44]: #Operators division returns int  
print(10 // 3)
```

3

```
In [45]: #Operators division modulus returns remainder  
print(10 % 3)
```

1

```
In [48]: #Operators multiplication  
  
print(10 * 3)
```

30

```
In [54]: #Operators power  
  
print(2 ** 3)
```

8

```
In [51]: #Operators augmented/incremented assignment  
x=10  
x += 3  
print(x)
```

13

```
In [55]: #operators calculations  
#1-parenthesis  
#2-exponentiation  
#3-multiplication or division  
#4-addition or subtraction  
  
x=(10+2) * 2 ** 3  
  
print(x)
```

96

```
In [56]: #Math fuctions round off  
x = 5.4  
print(round(x))
```

5

```
In [57]: #Math fuctions ABS-absolute returns positive number  
x = -5.4  
print(abs(x))
```

5.4

```
In [58]: #Math module for using built in calculations used as math.  
import math  
math.
```

```
In [66]: #for Loop for known criteria with start, end and step value  
  
for i in range(10,0,-1):  
  
    print(i)
```

```
10  
9  
8  
7  
6  
5  
4  
3  
2  
1
```

```
In [67]: #While Loop unknown criteria
number=int(input("enter number"))
rating=1
while rating<=10:
    product=number*rating
    print(number, 'x', rating, '=', product)
    rating=rating+1
```

```
enter number2
2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
2 x 4 = 8
2 x 5 = 10
2 x 6 = 12
2 x 7 = 14
2 x 8 = 16
2 x 9 = 18
2 x 10 = 20
```

```
In [68]: number=int(input("enter number"))
rating=1
while rating<=number:
    product=number*rating
    print('Test')
    rating=rating+1
```

```
enter number5
Test
Test
Test
Test
Test
```

```
In [ ]: #If Statements
```