



Introduction to PYTHON

while loop

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while Loop

while test:

Loop test

statements

Loop body

else:

Optional else

statements

Run if didn't exit loop with break

```
n = 0
while n<5:
    print(n)
    n = n+1
```

```
n = 0
```

```
while n<5:
```

```
    print(n)
```

```
    n = n+1
```

```
else:
```

```
    print("Hello World")
```

```
n = 0
while n<5:
    print(n)
    n = n+1
    if(n==3):
        break
else:
    print("Hello World")
```

Guess the output

➤ **x= 'computer'**

➤ **while x:**

➤ **print(x)**

➤ **x = x[1:]**

Output

computer

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Use of else as a flag

```
y = int(input("enter a value"))
x = y//2
while(x>1):
    if y % x == 0:
        print(y , 'has factor', x , "Not prime")
        break
    x = x-1
else:
    print(y, 'is a prime no')
```


while and for LOOPS

- Iterate through numbers in a sequence

more complicated with while loop

```
i = 0
```

```
while i < 5:
```

```
    print(i)
```

```
    i = i+1
```

shortcut with for loop

```
for i in range(5):
```

```
    print(i)
```

Program to find the sum of digit of a number

```
n = int(input("enter a number"))
```

```
s = 0
```

```
while(n!=0):
```

```
    a = n%10
```

```
    s = s+a
```

```
    n = n//10
```

```
print(s)
```

while test_exp :

statements

else:

statements