

In [1]:

```
1 l = [1,2,3,4,5,6,4,5,6]
```

In [12]:

```
1 for i in l: # 1,2,3,4,5,6,4,5,6
2     if i == 4:
3         print("number 4 is present")
```

number 4 is present

number 4 is present

In [11]:

```
1 for i in l: # 1,2,3,4,5,6,4,5,6
2     if i == 4:
3         print("number 4 is present")
4         break
```

number 4 is present

In [10]:

```
1 for i in l: # 1,2,3,4,5,6,4,5,6
2     if i == 4:
3         continue
4     print(i)
```

```
1
2
3
5
6
5
6
```

In [9]:

```
1 for i in l: # 1,2,3,4,5,6,4,5,6
2     if i == 4:
3         print("number 4 is present")
4         pass
5     print(i)
```

```
1
2
3
number 4 is present
4
5
6
number 4 is present
4
5
6
```

In [13]:

```

1  for i in l: # 1,2,3,4,5,6,4,5,6
2      if i == 4:
3          print("number 4 is present")
4          pass
5      print(i+10)

```

```

11
12
13
number 4 is present
14
15
16
number 4 is present
14
15
16

```

Today Topics

- while loop
- strings and string functions

In [15]:

```

1  for i in range(1,11):
2      print("python",end=" ")

```

python python python python python python python python python python

Syntax while condition: set of statements increment/decrement

Syntax

while condition:

- set of statements
- increment/decrement

In [1]:

```

1  n = 1 #2 #11
2  while n<= 10: # 1<=10
3      print(n,end=" ")
4      n = n+1 #n+=1

```

1 2 3 4 5 6 7 8 9 10

In [2]:

```

1 n = 1 #2 #11
2 while n<= 10: # 1<=10
3     print(n*n,end=" ")
4     n = n+1 #n+=1

```

1 4 9 16 25 36 49 64 81 100

In [4]:

```

1 i = 1 # 1,2,3,4,5,6
2 while i<6: # 1,2,3,4,5
3     if i == 3: # 1,2
4         break
5     print(i)
6     i+=1

```

1
2

In [7]:

```

1 n = int(input())
2 while n<=50:
3     print(n,end = " ")
4     n+=1

```

100

In [8]:

```

1 n = int(input())
2 while n<=50:
3     print(n,end = " ")
4     n+=1

```

48
48 49 50

In [9]:

```

1 for i in range(0,11,2):
2     print("python",end = " ")

```

python python python python python python

In [10]:

```

1 for i in range(10,20,1):
2     print("python",end = " ")

```

python python python python python python python python python python python

In [12]:

```
1 n1 = int(input()) #4000
2 n = int(input())  #2000
3 amount = n1-1000 #3000
4 while amount>2000:
5     if amount >n: # 4000>2000
6         print("Take ur money")
7     else: #4000 4000
8         print("Amount exceeds balance")
9     break
```

4000

2000

Take ur money

In []:

```
1 n1 = int(input()) #4000
2 n = int(input())  #2000
3 amount = n1-1000 #3000
4 while True:
5     if amount >n: # 4000>2000
6         print("Take ur money")
7     else: #4000 4000
8         print("Amount exceeds balance")
9     #break
```

4000

2000

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

Take ur money

In [2]:

```
1 n1 = int(input()) #4000
2 n = int(input()) #2000
3 amount = n1-1000 #3000
4 while True:
5     if amount >n: # 3000>2000
6         print("Take ur money")
7     else: #4000 4000
8         print("Amount exceeds balance")
9     break
```

3000

2000

Amount exceeds balance

In [3]:

```
1 n1 = int(input()) #4000
2 n = int(input()) #2000
3 amount = n1-1000 #3000
4 while True:
5     if amount >n: # 3000>2000
6         print("Take ur money")
7     else: #4000 4000
8         print("Amount exceeds balance")
9     break
```

4000

2000

Take ur money

In [6]:

```
1 n1 = int(input()) #10000
2 n = int(input()) #11000
3 #amount = n1-1000 #9000
4 while True:
5     if n1 >n:
6         print("Take ur money")
7     elif n1 ==n:
8         print("you have only",n1,"as ur balance")
9     else:
10        print("Amount exceeds balance")
11    break
```

10000

11000

Amount exceeds balance

In [7]:

```
1 n1 = int(input()) #10000
2 n = int(input())  #11000
3 amount = n1-1000 #9000
4 while amount>n:
5     print("take ur amount")
6     break
```

10000

11000

In [9]:

```
1 n1 = int(input()) #10000
2 n = int(input())  #11000
3 amount = n1-1000 #9000
4 while True:
5     if amount>n:
6         print("Take ur money")
7     else:
8         print("Amount exceeds balance")
9     break
```

10000

11000

Amount exceeds balance

In [11]:

```
1 ac_bal = 10000 # 10000
2 withdraw_amount = int(input()) # 11000
3 max_withdraw = ac_bal-1000 # 9000
4 while True:
5     if max_withdraw>withdraw_amount:
6         print("take ur money")
7     else:
8         print("amount exceeds")
9     break
```

8000

take ur money

String

" "

In [12]:

```
1 s = ""
2 type(s)
```

Out[12]:

str

In [19]:

```
1 s = "python Programming 123@"
```

Indexing

- positive index
- negative index

In [20]:

```
1 s[5]  
2 s[10]  
3 s[8]  
4 s[-3]
```

Out[20]:

'2'

Slicing

varname[start index : end index: step cont]

In [21]:

```
1 s[19]
```

Out[21]:

'1'

In [22]:

```
1 s[19:22] # 19,20,21
```

Out[22]:

'123'

In [30]:

```
1 print(s)  
2 s[15:26:21] # 15,17,19,21,23,25
```

python Programming 123@

Out[30]:

'i'

In [25]:

```
1 print(s[0:24:3])
2 print(s[0::3])
3 print(s[::3]) # for i in range(11,3) # s[0:24:3]
```

ph oai 3
ph oai 3
ph oai 3

In [26]:

```
1 s[18:5:-2] #for i in range(10,1,-1)
```

Out[26]:

' nmagr '

In [28]:

```
1 s[-6:-10:-1] # -6, -5, -4, -3, -2
```

Out[28]:

'gnim'

In [31]:

```
1 s[::-1] # -1:: -1
```

Out[31]:

'@321 gnimmargorP nohtyp'

In [32]:

```
1 s[::2] # -1:: -1
```

Out[32]:

'@2 nmagr otp'

In [33]:

```
1 len(s)
```

Out[33]:

23

In [34]:

```
1 t = len(s)//2
2 s[t]
```

Out[34]:

'r'

In [35]:

```
1 s[len(s)//2]
```

Out[35]:

'r'

In []:

```
1  
2  
3
```

In [36]:

```
1 s = "Hello" #s  
2 t = (len(s)//2)
```

In [37]:

```
1 s[(len(s)//2)]
```

Out[37]:

'l'

In [38]:

```
1 hari = 874982876872687587  
2 print(hari)
```

874982876872687587

In [39]:

```
1 hari = 874982876872687587  
2 print(hari+67)
```

874982876872687654

In [40]:

```
1 hari == 200
```

Out[40]:

False

In [43]:

```
1 <img src = "logo.png">
```

File "<ipython-input-43-37feae66856>", line 1

^

SyntaxError: invalid syntax

In [52]:

```
1 <img src =  
2 "https://upload.wikimedia.org/wikipedia/commons/thumb/c/c3/Python-logo-  
3 notext.svg/768px-Python-logo-notext.svg.png" height= 50 width = 50>
```

File "<ipython-input-52-df0e49ea27d9>", line 1

```
<img src =  
^
```

SyntaxError: invalid syntax

In [46]:

```
1 n = 11  
2 factors = 0  
3 for i in range(1,n+1): # (2,n) 11/1,11/2  
4     if n%i ==0: #11%1, 11%11  
5         factors+=1  
6     if factors ==2:  
7         print("prime")
```

prime

In []:

1

In []:

1