```
a = 10
b = 50
print('python')
print('django')
a > b
print('html')
```

```
python
django
html
```

```
a = 10
b = 50
print('python')
print('django')
if a > b:
 print('html')
```

```
python
django
```

```
a=10
b=20
if a>b:
  print('a is big')
if b>a:
  print('b is big')
  print('a is small')
```

```
b is big
a is small
```

```
if a>b:
  print('a is big')
else:
  print('b is big')
```

```
b is big
```

```
a = 100
b = 50
print('python')
if a > b:
 pass
```

```
python
```

```
a = 20
b = 20
print('python')
print('django')
if a - b:
 print('html')
 print('css')
```

```
python
django
```

```
a = 10
b = 20
print('python')
print('django')
if b - a:
 print('html')
 print('css')
```

```
python
django
html
css
```

```
a = 10
b = 20
s1='python'
s2='django'
if s1.islower():
 print('html')
 print('css')
```

```
html
css
```

```
if '''@''':
 print('html')
 print('css')
```

```
html
css
```

```
bike_color = 'red'
if bike_color == 'yellow':
 print('your bike is in yellow color')
else:
 print('your bike is not in yellow color')
```

```
your bike is not in yellow color
```

```
money = 80
if money == 100:
 print(money,'is equal to 100')
else:
 if money < 100:
  print(money,'is less than 100')
 else:
  print(money,'is grater than 100')
```

```
80 is less than 100
```

```
amount = 800
if amount >= 2000:
 print('2000 notes :',amount // 2000)
 amount = amount % 2000
if amount >= 500:
 print('500 notes :',amount // 500)
 amount = amount % 500
if amount >= 200:
 print('200 notes :',amount // 200)
 amount = amount % 200
if amount >= 100:
 print('100 notes :',amount // 100)
 amount = amount % 100
```

Show hidden output

```
amount = 1800
print('2000 notes :',amount//2000)
amount = amount % 2000
print('500 notes :',amount//500)
amount = amount % 500
print('200 notes :',amount//200)
amount = amount % 200
print('100 notes :',amount//100)
amount = amount % 100
```

```
2000 notes : 0
500 notes : 3
200 notes : 1
100 notes : 1
```

```
amount = input('Please enter valid amount : ')
if amount.isdigit():
 amount = int(amount) # data type conversion
 if amount % 100 == 0:
  if amount >= 2000:
   print('2000 notes :',amount // 2000)
   amount = amount % 2000
  if amount >= 500:
   print('500 notes :',amount // 500)
   amount = amount % 500
  if amount >= 200:
   print('200 notes :',amount // 200)
   amount = amount % 200
  if amount >= 100:
   print('100 notes :',amount // 100)
   amount = amount % 100
 else:
  print(amount,'is invalid amout')
else:
 print(amount,'is invalid data')
```

```
Please enter valid amount : 3800
2000 notes : 1
500 notes : 3
200 notes : 1
100 notes : 1
```

```
value = 10
# 100 is equal to 100
# 90 is less than 100
# 180 is grater than 100
if value == 100:
 print(value,'is equal to 100')
else:
 if value < 100:
  print(value,'is less than 100')
 else:
  print(value,'is grater than 100')
```

```
10 is less than 100
```

```
value = 100
if value == 100:
 print(value,'is equal to 100')
elif value > 100:
 print(value,'is grater than 100')
else:
 print(value,'is less than 100')
```

```
100 is equal to 100
```

```
amount = 300
if amount >= 500:
 print('ice-cream : family pack')
elif amount >= 400:
 print('ice-cream : large')
elif amount >= 300:
 print('ice-cream : medium')
elif amount >= 200:
 print('ice-cream : small')
elif amount >= 100:
 print('ice-cream : cup')
else:
 print('ice-cream : sample')
```

```
ice-cream : medium
```

```
brand = 'honda'
model = 'shine'
if brand == 'bajaj':
 print('welcome to bajaj')
 if model == 'pulsar':
  print('pulsar')
 elif model == 'boxer':
  print('boxer')
 else:
  print('invalid model selection')
elif brand == 'hero':
 print('welcome to hero')
 if model == 'splender':
  print('splender')
 elif model == 'passion':
  print('passion')
 else:
  print('Invalid model selection')
elif brand == 'honda':
 print('welcome to honda')
 if model == 'shine':
  print('shine')
 elif model == 'unicorn':
  print('unicorn')
 else:
  print('Invalid model selection')
else:
 print('Invalid brand selection')
```

```
welcome to honda
shine
```

```
name = 'Imran'
if name[0] in 'aeiouAEIOU':
 print(name,'starts with vowel')
else:
 print(name,'starts with consonent')
```

```
Imran starts with vowel
```

```
name = 'Lalitha'
if name[0].isupper():
 print(name,'starts with upper-case')
else:
 print(name,'not starts with upper-case')
```

```
Lalitha not starts with upper-case
```

```
s = 'python'
for i in s:
 print(i)
```

```
p
y
t
h
o
n
```

```
s = 10
for i in s:
 print(i,end=' ')
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-3-a2d808957172> in <cell line: 2>()
      1 s = 10
----> 2 for i in s:
      3  print(i,end=' ')

TypeError: 'int' object is not iterable
```

```
s = 'hyderabad'
for i in s:
 print(i.upper(),end=' ')
```

```
H Y D E R A B A D
```

```
s = 'HyDeraBad'
for i in s:
 if i in 'aeiouAEIOU':
  print(i.upper(),end=' ')
 else:
  print(i.lower(),end=' ')
```

```
h y d E r A b A d
```

```
s = 'hyderabad'
for i in s:
 pass
 print(i,end=' ')
else:
 print('for loop completed')
```

```
h y d e r a b a d for loop completed
```

```
s = 'hyderabad'
for i in range(0,9):  # range(9) = (0,1,2,3,4,5,6,7,8)
 pass
 print(s[i],end=' ')
else:
 print('for loop completed')
```

```
h y d e r a b a d for loop completed
```

```
s = 'jagadeesh'
count = 0
for i in s:
 if i in 'aeiouAEIOU':
  count = count + 1
else:
 print('vowel count :',count)  # 4
```

```
vowel count : 4
```

```
for i in range(1,5):
 print(i)
```

```
1
2
3
4
```

```
for i in range(False,True):
 print(i)
```

```
0
```

```
for i in range(5):
 if i > 2:
  break
 print(i)
else:
 print(i)
```

```
0
1
2
```

```
s = 'hyderabad'
s1 = ''
s2 = ''
for i in range(len(s)):
 if i % 2 == 0:
  s1 = s1 + s[i]
 else:
  s2 = s2 + s[i]
print(s1,s2)
```

```
hdrbd yeaa
```

```
for i in range(0,20,3):
 print(i,end=' ')
```

```
0 3 6 9 12 15 18
```

```
for i in range(30,20,-3):
 print(i,end=' ')
```

```
30 27 24 21
```

```
for i in range(20,13,100):
 print(i,end=' ')
```

```
for i in range(0,20,0):
 print(i,end=' ')
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
<ipython-input-8-bb221ce66bf0> in <cell line: 1>()
----> 1 for i in range(0,20,0):
      2  print(i,end=' ')

ValueError: range() arg 3 must not be zero
```

```
for i in range(1,11):
 print(6,'*',i,'=',6*i)
```

```
6 * 1 = 6
6 * 2 = 12
6 * 3 = 18
6 * 4 = 24
6 * 5 = 30
6 * 6 = 36
6 * 7 = 42
6 * 8 = 48
6 * 9 = 54
6 * 10 = 60
```

```
table_num = input('please enter table number : ')
table_num = int(table_num)
for i in range(1,11,1):
 print(table_num,'*',i,'=',table_num * i)
```

```
please enter table number : 3
3 * 1 = 3
3 * 2 = 6
3 * 3 = 9
3 * 4 = 12
3 * 5 = 15
3 * 6 = 18
3 * 7 = 21
3 * 8 = 24
3 * 9 = 27
3 * 10 = 30
```

```
table_num = input('please enter table number : ')
for i in range(1,11,1):
 print(table_num,'*',i,'=',table_num * i)
```

```
please enter table number : Hi
Hi  * 1 = Hi
Hi  * 2 = Hi Hi
Hi  * 3 = Hi Hi Hi
Hi  * 4 = Hi Hi Hi Hi
Hi  * 5 = Hi Hi Hi Hi Hi
Hi  * 6 = Hi Hi Hi Hi Hi Hi
Hi  * 7 = Hi Hi Hi Hi Hi Hi Hi
Hi  * 8 = Hi Hi Hi Hi Hi Hi Hi Hi
Hi  * 9 = Hi Hi Hi Hi Hi Hi Hi Hi Hi
Hi  * 10 = Hi Hi Hi Hi Hi Hi Hi Hi Hi Hi
```

```
table_num = input('please enter table number : ')
if table_num.isdigit() == True:
    table_num = int(table_num)
    if table_num > 0 and table_num < 11:
      for i in range(1,11,1):
        print(table_num,'*',i,'=',table_num * i)
    else:
      print('Invalid table number range')
else:
  print('Invalid input data')
```

```
please enter table number : 7
7 * 1 = 7
7 * 2 = 14
7 * 3 = 21
```

```
7 * 4 = 28
7 * 5 = 35
7 * 6 = 42
7 * 7 = 49
7 * 8 = 56
7 * 9 = 63
7 * 10 = 70
```

```
s = input('please enter data : ')
print('+ve indexes:')
for i in range(len(s)):
  print(s[i],end=' ')
print()
for i in range(len(s)-1,-1,-1):
  print(s[i],end=' ')
print()
print('-ve indexes : ')
for i in range(-len(s),0):
  print(s[i],end=' ')
print()
for i in range(-1,-len(s)-1,-1):
  print(s[i],end=' ')
```

```
please enter data : lalitha
+ve indexes:
l a l i t h a
a h t i l a l
-ve indexes :
l a l i t h a
a h t i l a l
```

```
num = 7
count = 0
for i in range(2,num):
  if num % i == 0:
    count = count + 1
else:
  if count == 0:
    print(num,'is a prime number')
  else:
    print(num,'is not a prime number')
```

```
7 is a prime number
```

```
for i in range(1,7):
  if i == 6:
    break
  print(i,end=' ')
else:
  print('Thank you')   # 1 2 3 4 5
```

```
1 2 3 4 5
```

```
num = input("Enter a number : ")
count = 0
if num.isdigit() == True:
  num = int(num)
  for i in range(2,num):
    if num % i == 0:
      count = count + 1
  else:
    if count == 0:
      print(num,'is a prime number')
    else:
      print(num,'is not a prime number')
else:
  print('Invalid data')
```

```
Enter a number : 3.5
Invalid data
```

```
s = 'python'
for i in s:
  print(i,end=' ')
```

```
p y t h o n
```

```
s = 'python'
for i in s:
  print(i,end=' ')
  continue
```

```
p y t h o n
```

```
s = 'python'
for i in s:
  continue
  print(i,end=' ')
```

```
s = 'python'
for i in s:
  continue
  print(i,end=' ')
else:
  print(s)
```

```
python
```

```
s = 'python'
for i in s:
  break
  print(i,end=' ')
else:
  print(s)
```

```
s = 'python'
for i in s:
  print(i,end=' ')
  break
else:
  print(s)
```

```
p
```

```
s = 'python'
for i in s:
  print(i,end=' ')
  continue
  break
else:
  print(s)
```

```
p y t h o n python
```

```
s = 'python'
for i in range(len(s)):
  print(i,s[i])
```

```
0 p
1 y
2 t
3 h
4 o
5 n
```

```
s = 'python'
for i,j,k in enumerate(s):
  print(i,j)
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
<ipython-input-22-3c043e4c4396> in <cell line: 2>()
      1 s = 'python'
----> 2 for i,j,k in enumerate(s):
      3   print(i,j)

ValueError: not enough values to unpack (expected 3, got 2)
```

Next steps: Explain error

```
s = 'python'
for index,value in enumerate(s):
  print(index,value)
```

```
0 p
1 y
2 t
3 h
4 o
5 n
```

```
s = range(1,10)
for index,num in enumerate(s):
  print(index,num)
```

```
0 1
1 2
2 3
3 4
4 5
5 6
6 7
7 8
8 9
```

```
for index,num in enumerate(range(20,31)):
  print(index,num)
```

```
0 20
1 21
2 22
3 23
4 24
5 25
6 26
7 27
8 28
9 29
10 30
```

```
s1 = 'python'
s2 = 'javascript'
for i in s1:
  print(i,end=' ')
for j in s2:
  print(j,end=' ')
```

```
p y t h o n j a v a s c r i p t
```

```
s1 = 'python'
s2 = 'javascript'
for ch1,ch2 in zip(s1,s2):
  print(ch1,ch2)
```

```
p j
y a
t v
h a
o s
n c
```

```
s1 = 'python'
s2 = 'javascript'
s3 = 'lalitha'
for ch1,ch2,ch3 in zip(s1,s2,s3):
  print(ch1,ch2,ch3)
```

```
p j l
y a a
t v l
h a i
o s t
n c h
```

```
s1 = 'python'
s2 = 'javascript'
s1_len = len(s1)
s2_len = len(s2)
dif = 0
if s1_len > s2_len:
  dif = s1_len - s2_len
  s2 = s2 + (' '*dif)
else:
  dif = s2_len - s1_len
  s1 = s1 + (' '*dif)
```