

```
In [14]: 1 name=input()
          2 a=name[0]
          3 b=name[-1]
          4 c=len(name)-2
          5 d=c*"*"
          6 print(a,d,b)
```

```
siddhardha
s ***** a
```

```
In [23]: 1 dic={'dhf':'ggu','dyhd':'ghg'}
          2 dic.pop('dhf')
          3 print(dic)
```

```
{'dyhd': 'ghg'}
```

```
In [33]: 1 print("I am",input())
          2
```

```
siva
I am siva
```

```
In [ ]: 1 a=input()
          2 print(a)
```

Conditional statements

- if
- if else
- elif
- nested if

```
1 ### if statement syntax
2 if(condition):
3     statements
```

```
In [39]: 1 n=int(input())
          2 if(n%2==0):
          3     print('even')
```

```
10
even
```

```
In [42]: 1 n=int(input())
          2 if(n>0):
          3     print('positive')
```

-5

```
1 ## Syntax for if else statement
2 if(condition):
3     statement
4 else:
5     statement
```

```
In [50]: 1 a=int(input())
          2 if(a>18):
          3     print("eligible for vote")
          4 else:
          5     print("not eligible for vote")
          6
```

19
eligible for vote

```
In [52]: 1 a=int(input())
          2 if(100<a<200):
          3     print("exist")
          4 else:
          5     print("does not exist")
          6
```

203
does not exist

```
In [54]: 1 a=int(input())
          2 b=int(input())
          3 if(a>b):
          4     print(a,"a is big")
          5 else:
          6     print(b,"b is big")
```

5
6
6 b is big

```
In [55]: 1 a=6
          2 a
```

Out[55]: 6

In [58]:

```
1 a=int(input())
2 b=int(input())
3 c=int(input())
4 if(a>b and a>c):
5     print(a,"is big")
6 elif(b>c):
7     print(b,"is big")
8 else:
9     print(c,"is big")
10
```

```
25
45
79
79 is big
```

In [10]:

```
1 a=int(input())
2 if(90<=a<=100):
3     print("Excellent")
4 elif(80<=a<=89):
5     print("A Grade")
6 elif(70<=a<=79):
7     print("B Grade")
8 elif(60<=a<=69):
9     print("C Grade")
10 elif(50<=a<=59):
11     print("D Grade")
12 elif(a<=49):
13     print("fail")
14 else:
15     print("Invalid marks")
```

```
88
A Grade
```

In [21]:

```
1 ch=input()
2 vowels="aeiouAEIOU"
3 if ch in vowels:
4     print("vowel")
5 else:
6     print("consonant")
```

```
a
vowel
```

```
In [4]: 1 month=input()
2 a=["April","June","September","November"]
3 b=["January","March","May","July","August","October","December"]
4 if month in a:
5     print(month," has 30 days")
6 elif month in b:
7     print(month," has 31 days")
8 elif(month=="february"):
9     print(month,"has 28 or 29 days")
10 else:
11     print("invalid month")
12
```

April
April has 30 days

```
In [20]: 1 a=int(input())
2 if(a%2==0):
3     print(a,"is even")
4     if(a>10):
5         print(a**3)
6     else:
7         print(a**2)
8 else:
9     print(a,"odd")
10
```

24
24 is even
13824

Loops

- 1.for loop
- 2.while loop

for loop syntax

for value in range(start,end,stepcount)

```
In [27]: 1 num=int(input())
2 for i in range(1,num+1):
3     print(i,end=' ')
```

100
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 3
0 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56
57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 8
3 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

```
In [ ]: 1 num=int(input())
        2 for i in range(1,num+1,2):
        3     print(i,end=' ')
```

```
In [6]: 1 num=int(input())
        2 for i in range(1,21):
        3     print(num,"x",i,"=",num*i)
```

```
20
20 x 1 = 20
20 x 2 = 40
20 x 3 = 60
20 x 4 = 80
20 x 5 = 100
20 x 6 = 120
20 x 7 = 140
20 x 8 = 160
20 x 9 = 180
20 x 10 = 200
20 x 11 = 220
20 x 12 = 240
20 x 13 = 260
20 x 14 = 280
20 x 15 = 300
20 x 16 = 320
20 x 17 = 340
20 x 18 = 360
20 x 19 = 380
20 x 20 = 400
```

```
In [8]: 1 j=int(input())
        2 for i in range(1,j+1):
        3     if(j%i==0):
        4         print(i,end=' ')
```

```
20
1 2 4 5 10 20
```

```
In [15]: 1 k=int(input())
        2 f=1
        3 for j in range(1,k+1):
        4     f=f*j
        5 print(f)
```

```
5
120
```

```
In [ ]: 1 a=int(input())
        2 for i in range(1,a)
```

