

```
In [1]: a=10  
b=22.2  
c=a+b  
print(c)
```

32.2

```
In [3]: import math  
a=16  
b=math.sqrt(16)  
print(b)
```

4.0

```
In [5]: a=16  
b=a**0.5  
print(b)
```

4.0

```
In [7]: a='hemanth'  
for i in range(4):  
    print(a)
```

hemanth
hemanth
hemanth
hemanth

```
In [8]: a=-1  
b=abs(a)  
print(b)
```

1

```
In [9]: a=10  
b=float(a)  
print(b)
```

10.0

In [10]: *#program to find remainder and quotient*

```
dividend = 10
divisor = 3

quotient = dividend // divisor
remainder = dividend % divisor

print(f"Quotient: {quotient}")
print(f"Remainder: {remainder}")
```

Quotient: 3
Remainder: 1

In [14]:

```
a=12.
b=round(a)
print(b)
```

13

In [16]:

```
a='hemanth'
for i in range(len(a)):
    print(i,a[i])
```

0 h
1 e
2 m
3 a
4 n
5 t
6 h

In [19]: *#program to get first character in every list*

```
a=['hemanth','2002','August','08']
b=[]
for i in a:
    b.append(i[0])
print(b)
```

['h', '2', 'A', '0']

In [24]: *#program to get end character in every list*

```
a=['hemanth','2002','August','08']
b=[]
for i in a:
    b.append(i[-1])
print(b)
```

['h', '2', 't', '8']

```
In [23]: #program to print only starting with ovels
a=['hemanth','owl','eagle','lion']
b=[]
c='aeiou'
for i in a:
    if i[0] in c:
        b.append(i)
print(b)
```

```
['owl', 'eagle']
```

```
In [25]: #program to print only even numbers
a=[12,13,15,16,18]
b=[]
for i in a:
    if i%2==0:
        b.append(i)
print(b)
```

```
[12, 16, 18]
```

```
In [40]: a=[12,23,45,56,67]
b=[]
c=['0','2','4','6','8']
for i in a:
    z=i[0]
    if z in c:
        b.append(i)
print(b)
```

```
-----
TypeError                                Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_21920\2878720179.py in <module>
      3 c=['0','2','4','6','8']
      4 for i in a:
----> 5     z=i[0]
      6     if z in c:
      7         b.append(i)
```

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

```
In [39]: a = [12, 23, 45, 56, 67]
b = []
c = ['0', '2', '4', '6', '8']

for i in a:
    first_digit_str = str(i)[0] # Convert the number to a string and get the
    if first_digit_str not in c: # Check if the first character is not in the
        b.append(i)

print(b) # Output: [23, 45, 67]
```

```
[12, 56]
```

```
In [42]: #add two matrices
import numpy as np
a=[[1,2,3],
   [4,5,6]]
b=[[1,2,3],
   [4,5,6]]
c=np.array(a)+np.array(b)
print(c)
```

```
[[ 2  4  6]
 [ 8 10 12]]
```

```
In [43]: #multiply two matrices
import numpy as np
a=[[1,2,3],
   [4,5,6]]
b=[[1,2,3],
   [4,5,6]]
c=np.array(a)*np.array(b)
print(c)
```

```
[[ 1  4  9]
 [16 25 36]]
```

```
In [47]: #add two matrices
import numpy as np
a=np.array([1,2,3])
b=np.array([4,5,6])
c=np.add(a,b)
print(c)
```

```
[5 7 9]
```

```
In [48]: #transpose of a matrix  
import numpy  
matrix = [[1, 2, 3], [4, 5, 6]]  
print(numpy.transpose(matrix))
```

```
[[1 4]  
 [2 5]  
 [3 6]]
```

```
In [52]: #get kth coloumn of a matrix  
a=[[1,2,3],[4,5,6],[7,8,9]]  
b=[]  
k=2  
for i in range(len(a)):  
    b.append(a[i][k])  
print(b)
```

```
[3, 6, 9]
```

```
In [55]: #symmentrical  
a='khokho'  
b=len(a)//2  
c=a[:b]  
d=a[b:]  
if c==d:  
    print('symmentrical')  
else:  
    print('not symmentrical')
```

```
symmentrical
```

```
In [60]: #reverse words  
a='hemanth is studying in jspyders'  
b=a.split()  
c=b[::-1]  
print(c)
```

```
['jspyders', 'in', 'studying', 'is', 'hemanth']
```

```
In [62]: #program to remove letters from a string
a='hemanth1234'
b='1234'
c=''
d=''
for i in a:
    if i in b:
        c=c+i
    else:
        d=d+i
print(d)
```

hemanth

```
In [64]: a='hemanth1234'
b=[]
c=[]
for i in a:
    if i.isdigit():
        b.append(i)
    else:
        c.append(i)
z=''.join(c)
print(z)
```

hemanth

```
In [69]: #subsequence
a='hemanth'
b='man'
if b in a:
    print('subsequence')
else:
    print('not subsequence')
```

subsequence

```
In [74]: from collections import Counter
a='I am the best in the business'
b=Counter(a.split())
print(b)
d=b.values()
print(d)
```

```
Counter({'the': 2, 'I': 1, 'am': 1, 'best': 1, 'in': 1, 'business': 1})
dict_values([1, 1, 2, 1, 1, 1])
```

```
In [89]: #Python Program to Accept the Strings Which Contains all Vowels
a='ahemanthiou'
b=set('aeiou')
c=set()
for i in a:
    if i in b:
        c.add(i)
    else:
        pass
if len(c)==len(b):
    print('yes')
else:
    print('No')
```

yes

In []:

In []: