In [4]:

```python
#1
import math
C=50
H=30

D=list(map(int,input().split(",")))

for i in range(len(D)):
    Q=int(math.sqrt((2*C*D[i])/H))
    if i==len(D)-1:
        print(Q)
    else:
        print(Q,end=",")
```

```
100,150,180
18,22,24
```

In [9]:

```python
#2
x=int(input())
y=int(input())
a=[[0 for i in range(y)] for i in range(x)]

for i in range(x):
    for j in range(y):
        a[i][j]=i*j
print(a)
```

```
3
5
[[0, 0, 0, 0, 0], [0, 1, 2, 3, 4], [0, 2, 4, 6, 8]]
```

In [11]:

```python
#3

l=list(input().split(","))
k=sorted(l)
for i in range(len(k)):
    if i==len(k)-1:
        print(k[i])
    else:
        print(k[i],end=",")
```

```
without,hello,bag,world
bag,hello,without,world
```

In [14]:

```python
# 4


l=list(input().split(" "))

k=sorted(list(set(l)))
for i in range(len(k)):
    if i==len(k)-1:
        print(k[i])
    else:
        print(k[i],end=" ")

```

```
hello world and practice makes perfect and hello world again
again and hello makes perfect practice world
```

In [15]:

```python
# 5

l=input()

l_c=0
d_c=0

for i in l:
    if i.isnumeric():
        d_c+=1
    elif i.isalpha():
        l_c+=1
print("Letters:",l_c)
print("Digits:",d_c)

```

```
hello world! 123
Letters: 10
Digits: 3
```

In [22]:

```python
# 6


l=list(input().split(","))
ver="ABCDEFGHIJKLMNOPQRSTUVWXYZ"
spec="""!@#$%^&*()-_+={[}]|\;:'\",.<>/?"""
num="1234567890"
for i in range(len(l)):
    if 6<= len(l[i]) and len(l[i])<=12 :
        a=any(j in ver for j in l[i])
        b=any(j in ver.lower() for j in l[i])
        c=any(j in spec for j in l[i])
        d=any(j in num for j in l[i])


        if  a and b and c and d:
            if i==len(l):
                print(l[i])
            else:

                print(l[i])

```

ABd1234@1,a F1#,2w3E*,2We3345
ABd1234@1