In [1]:
```python
l,s,u,d=0,0,0,0
def valid_password(string):
    global l,s,u,d

    if (len(string)>=10):
        for i in string:

            if (i.islower()):
                l+=1
            if (i.isupper()):
                u+=1
            if (i.isdigit()):
                d+=1
            if(i=="@" or i=="$" or i=="_"):
                s+=1
    if (l>=2 and u>=2 and s>=3 and d>=1 and l+s+u+d==len(string)):
        print("valid password")

    else:
        print("invalid password")
string=input("enter your password: ")
valid_password(string)
```

invalid password

In [21]:
```python
2.

string="i want to bacome a data scientist"
w=input("enter your letter: ")
s=[True if string.startswith(w) else False ]
print(s)
```

[False]

In [24]:
```python
s=input("enter sentence: ")
res=[True if s.isnumeric() else False]
print(res)
```

[True]

In [12]:
```python
sample=[("mango",99),("orange",80),("grapes",1000)]
sample.sort(key=lambda x:x[1])
print(sample)
```

[('orange', 80), ('mango', 99), ('grapes', 1000)]

In [21]:
```python
l=[]
for i in range(1,11):

    l.append(i)
    i+=1
print(l)

print(list(map(lambda x:x*x,l)))
```

```
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
[1, 4, 9, 16, 25, 36, 49, 64, 81, 100]
```

In [23]:
```python
l=[]
for i in range (1,11):
    l.append(i)
    i+=1
print(l)
print(list(map(lambda x:x*x*x,l)))
```

```
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
[1, 8, 27, 64, 125, 216, 343, 512, 729, 1000]
```

In [32]:
```python
num=int(input("enter your no: "))
res=["even" if num%2==0 else "odd"]
print(res)
```

```
['even']
```

In [34]:
```python
l=[1,2,3,4,5,6,7,8,9,10]
res=[x for x in l if x%2!=0]
print(res)
```

```
[1, 3, 5, 7, 9]
```

In [ ]: