1.The following code is to find weather number falls in given range number is

In [52]:
```
def fndnum(n,r1,r2):
    for i in range(r1,r2):
        if i==n:
            print(n," is in a given range")
            break
    else:
            print(n," is not in a given range")
fndnum(1,1,10)
```

```
1  is in a given range
```

2.Cards and reduce

In [53]:
```
cards=eval(input("Enter number of cards "))
print('Cards reduced in your hand are',cards//2)
```

```
Enter number of cards 21
Cards reduced in your hand are 10
```

3.ramndom number and print A

In [54]:
```
from random import randint
num=eval(input("Enter positive number"))
if num<0:
    print("Enter positive number only")

else:
    print("Random number is ",randint(num,num+10))
    print('A'*(num+10))
```

```
Enter positive number4
Random number is  6
AAAAAAAAAAAAAA
```

4.Billing system

In [41]:
```
shours=eval(input("Enter starting hours "))
ehours=eval(input("Enter end hours "))
if shours>ehours:
    print("End hours must be greater than starting hours")
elif shours<1 or ehours>23:
    print("starting hours and End hours between 1 nad 23 only")
else:
    print("Your billing for",(ehours-shours),"is $",(ehours-shours)*5.5)
```

```
Enter starting hours2
Enter end hours12
Your billing for 10 is $ 55.0
```

5.Dice simulator

In [51]:
```
cnt=0
from random import randint
for i in range(1,10000):
```

```
    die1=randint(1,6)
    die2=randint(1,6)
    score=die1+die2
    if die1==2 and die2==2:
        cnt+=1

print("Probability of two dies having double is ",100*cnt/10000)
```

```
Probability of two dies having double is  2.98
```