

**1.**

```
def test_range(n,start,stop):
    if n in range(start,stop):
        print("%s is in the range"%str(n))
    else:
        print("The number is outside the given range")

num=int(input("enter the number: "))
min=int(input("enter the start number in range: "))
max=int(input("enter the stop number in range: "))
test_range(num,min,max)
```

**2.**

```
cards=int(input("enter how many cards you have? "))
print("Reduced number of cards are: ", cards//2)
```

**3.**

```
import random
n=int(input("Enter the number: "))
num=int(input("Enter number of random numbers:"))
if n < 0:
    print("Please enter positive number")
else:
    for j in range(num):
        x=random.randint(n,n+10)
        print("A", end=" ")
```

**4.**

```
start=int(input("enter the start hour: "))
end=int(input("enter the end hour: "))

if end>start:
    print("Total billing: ", (end-start)*5.50)
elif (end == start):
    print("Billing is not valid")
else:
    print("Total billing: ", (24-start + end)*5.50)
```

**5.**

```
import random
count=0
for i in range(10000):
    dice1=random.randint(1,6)
    dice2=random.randint(1,6)
```

```
    if dice1==dice2:
        count = count + 1
print("% probability of getting same number on both the
dice:", (count/10000)*100)
```