**DAY – 1**

**1.Right Triangle:**

rows=4

for i in range(rows):

Print(“\*”\*i)

**Output: \***

**\* \***

**\* \* \***

**\* \* \* \***

**2.Left Triangle:**

row=4

K=2\*rows-2

for i in range(rows):

for j in range(k):

Print(end= ” “ )

K=k-2

for j in range (i+1):

print(“\*”,end=” “)

print()

**Output:**  **\***

**\* \***

**\* \* \***

**\* \* \* \***

**3.Remove Duplicates:**

List\_1={1,2,3,4,7}

List\_2={5,0,4,1,3}

Print(list(set(list\_1)^set(list\_2))

**Output: [0,2,5,7]**

**4.Print only duplicates:**

Arr=[1,2,3,4,5,2,1,7,8]

Counts={ }

for num in arr:

Counts [num]=counys.get(num,0)+1

for num, count in count items():

if count>1:

Print(f”{num} appears {count} times

**Output: 2=2 times**

**1=2 times**

**5.Positive, Negative- sum and average:**

Sum=0

while True:

a=4

if a==-1:

break

sum=sum+a

avg=sum/2

Print(sum)

Print(avg)

**Output: 5**

**2**

**6.Tech number:**

num=3025

first\_half=int(num/100)

Print(first\_half)

Product=(first\_half\_second\_half)\*\*2

if(product==num):

print(“the number is tech: “+str(num))

else:

print(“the number is not tech: “+str(num))

**Output: the number is tech number**

**7.Perfect Number:**

from math import sqrt

num=16

print(sqrt(16)\*sqrt(16)==num)

**Output: True**

**8.Prime and composite numbers:**

num=2

if num>1:

for i in range (2,num)

if (num%i)==0:

print(num,”is a composite”)

break

else:

print(num,”is a prime number”)

**Output: is a prime number**

**9.Convert Sentence into uppercase and lowercase:**

Name=”ravi is sleeping”

Print(name.upper( ))

Print(name.lower( ))

Print(len(“ravi is sleeping”.split( ))

Words=name.split(“ “)

Count=0

For i in words:

If list(i)[0]-lower( )==’s’:

Count+=i

Print(count)

**Output: RAVI IS SLEEPING**

**Ravi is sleeping**

**4**

**1**

**10.Alphabets with their unique code:**

For i in range (ord(“A”), ord(“Z”)+1):

Print(f”{chr(i)}-{i}”)

**Output: A=65, B=66, C=67, D=68, etc...**