**Name: Sai**

**Problem Statement:**

Secret Handshake

**Source Code:**

alist={"1":"wink","10":"double blink","100":"close eyes","1000":"jump"}

print (alist)

n=int(input("Enter the decimal number: "))

a=bin(n)

b=a[2:]

print ("The binary number is: ",b)

blist=[]

alist1=list(str(b))

print ("The binary number in as spilt manner: ",alist1)

n=len(alist1)

flag=0

for i in reversed(range(n)):

if(alist1[flag]!=0):

e=str(alist1[flag])+str('0'\*i)

blist.append(e)

flag+=1

print (blist)

clist=[]

for k,v in alist.items():

for i in reversed(blist):

if i==k:

clist.append(v)

print(clist)

**Output:**

{'1': 'wink', '10': 'double blink', '100': 'close eyes', '1000': 'jump'}

The binary number is: 1100

The binary number in as spilt manner: ['1', '1', '0', '0']

['1000', '100', '00', '0']

['close eyes', 'jump']

**Ouput2:**

{'1': 'wink', '10': 'double blink', '100': 'close eyes', '1000': 'jump'}

The binary number is: 1101

The binary number in as spilt manner: ['1', '1', '0', '1']

['1000', '100', '00', '1']

['wink', 'close eyes', 'jump']