Lab3

#the program to take input from user and convert temperature from fahrenheit to celsius and vice versa

```
'''temp=float(input("enter the temp in celsius or fahrenheit"))
type=input("enter f to convert into fahrenheit and c to convert into celsius")
if(type=='f'):
    result=(temp*(9/5))+32
    print("the temperature in fahrenheit is" , result)
else:
    result= (temp-32)*(5/9)
    print("the temperature in celsius is" , result)
    '''
#program to generate a number between 1500  and 2700 thats divisible by 7 and multiple of 5
'''for a in range(1500,2701):
    if(a%5==0 and a%7==0):
        print(a)'''
```

#program to generate a random number bw 1 and 9 and keep on asking for user input unless true

```
'''import random
num=random.randint(1,9)
while True:
    user_input=int(input("enter your guess"))
    if(num==user_input):
       print("successful guess")
       break
    else:
        print("enter again") '''
```

#printing a pattern

```
'''n=int(input("enter the number of rows"))
x=int(input("enter the number of columns"))
for i in range(n):
    for j in range(1,x+1):

         print(j,end="")
    print(" ") '''
#pattern printing
'''for i in range(1,6):
    for j in range(1,i+1):
        print('*' ,end="")
    print(" ")
```

```
for i in range(4):
    for j in range(4-i,0,-1):
        print('*' ,end="")
    print(" ") '''
```

#pattern printng

```
'''rows=int(input("enter the number of rows"))
for i in range(1,rows+1):
    for j in range(rows-i):
        print(" ",end=" ")
    for k in range(1,2*i) :
        print(k,"" ,end="")
    print(" ")'''
```

#reverse the string

```
'''str=input("enter a string")
print(str[::-1])'''
```

#using loop

```
'''text=input("enter")
string=" "
for char in text   :
    string=char+string
print(string)'''
```

#no of evens and odds

```
'''even=0
odd=0
numbers=(1,2,3,4,5,6,7,8,9,10)
for num in numbers:
    if(num%2==0):
        even+=1
    else:
        odd+=1
print("no of evens are", even)
print("no of odds are", odd)     '''
```

#determining the datatype

```
'''x=(0,-1)
print(type(x))
x=(1452,11.323,1+7j)
print(type(x))
x=True
```

```
print(type(x))
x='w3resource'
print(type(x))
x=[5,12]
print(type(x))
x={"class:'v","section",'A'}
print(type(x))'''
```

#printing numbers from 0 to 6

```
'''for i in range(6):
    if(i==3 or i==6):
        continue;
    else:
        print(i)'''
```

#printing a fibonacci series between 0 and 50

```
'''a=0
b=1
print(a)
print(b)
c=a+b
print(c)
while(c<50):
    a=b
    b=c
    c=a+b
    if(c<=50):
      print(c)'''
```

#fizz and buzz

```
'''for i in range(1,51):
    if(i%3==0 and i%5==0):
        print("FIZZBUZZ")
    elif(i%3==0):
        print("FIZZ")
    elif(i%5==0):
        print("BUZZ")
    else:
        print(i) '''
```

#generating a two dimensional array

```
'''array=[]
```

```
for i in range(3):
     sub_array=[]
     for j in range(4):
         sub_array.append(i*j)
     array.append(sub_array)
print(array)'''
```

#asking for user input until blank line entered

```
'''while True:
    enter=input("enter the input.use blank line to terminate")
    if(enter==""):
      break
    else:
      print(enter.lower())'''
```

#binary sequence

```
'''list=[]
for i in range(4):
  enter=input("enter")
  enter=int(enter,2)
  list.append(enter)
for i in list:
    if(i%5==0):
        print(i)'''
```

#counting the number of digits and letters

```
'''letters=0
digits=0
word=input("enter the input")
for i in word:
    if(ord(i)>=65 and ord(i)<=90 ):
      letters+=1
    elif(ord(i)>=97 and ord(i)<=122):
       letters+=1
    elif(ord(i)>=48 and ord(i)<=57) :
       digits+=1
print("no of letters are :",letters)
print("no of digits are :",digits)'''
```

#password verification

```
'''pwd=input("enter your password")
if 6<=len(pwd)<=16:
    key1=0
    key2=0
    key3=0
    for i in pwd:

        if(i=='@'or i=='#' or i=='$'):
           key1=1

        i=ord(i)
        if( i>=48 and i<=57 ):
           key2=1

        if( (i>=65 and i<=90) or (i>=97 and i<=122) ) :
            key3=1

    if(key1==1 and key2==1 and key3==1):
        print("successful")
    else:
        print("enter again")
else:
    print("enter again")'''
```