**Q1. Multiples of a Number Write a program that prints all multiples of 7 between 1 and 100 using a `while` loop.**  
i=0

while(i<100):

    if(i%7==0):

        print(i,"\n")

    i+=1

# we are starting the loop from 0 and going till 100 and if i is fully divisible by 7 then printing it.

**Q2. Sum Until Limit Ask the user to enter numbers one by one. Stop asking when the sum of entered numbers becomes greater than 100. Use a `while` loop and `break` statement.**  
  
ans=0

while(True):

    num=int(input("Enter a number:"))

    ans+=num

    print(f'the value of sum is ',ans)

    if(ans>=100):

        print(f'we have reached the maxlimit',ans)

        break

**Q3. Skip a Character Ask the user to enter a string. Print each character on a new line, but skip the character `'a'` using the `continue` statement.**

str=input("Enter your name:")

for i in str:

    if i=='a' or i=='A':

        continue

    print(i,"\n")

**Q4. Login Attempts You are allowed a maximum of 3 login attempts. Ask the user to enter a password (hardcode correct password as "python123"). If the correct password is entered, print "Login Successful" and stop. If not, after 3 attempts, print "Account Locked". Use a loop and `break`.**

correctPassword='python123'

count=0

while(True):

    password=input("Enter the Password")

    if password!=correctPassword:

        count+=1

        if count>2:

            print("Account Locked")

            break

    elif password==correctPassword:

        print("Login Successfull")

        break

**Q5. Check Prime Ask the user for a number and check if it is a prime number using a `for` loop. Use the `else` block in the `for` loop effectively.**

num=int(input("Enter a number"))

flag=True

if(num==1):

    print("Its not a prime number")

for i in range(2,int(num\*\*0.5),+1):

    if(num%i==0):

        flag=False

    else:

        flag=True

else:

    print("program run successfully")

if flag==True:

    print("Its  a prime number")

else:

    print("Its not a prime number")

**Q6. Skipping Even Numbers Print all odd numbers from 1 to 50 using a `for` loop and `continue` statement to skip even numbers.**

for i in range(0,50,+1):

    if(i%2==0):

        continue

    print("\n",i)

**Q7. Use of `pass` Write a program that loops from 1 to 10 and prints each number. If the number is 5, use the `pass` statement (do nothing for that number, but don’t skip it either). Observe the behavior.**

for i in range(11):

    print(i)

    if i==5:

        pass

**Q8. Factorial Calculation Ask the user to enter a positive integer and calculate its factorial using a `while` loop.**

num=int(input("Enter a positive integer"))

orginalNum=num

ans=1

while(num):

    ans\*=num

    num-=1

print(f'factorial of {orginalNum} is {ans} ')

**Q9. Countdown Timer Write a countdown from 10 to 1 using a `for` loop. After reaching 1, print "Liftoff!"**

for i in range(10,0,-1):

    if(i==1):

        print("Liftoff")

        break

    print(i)

**Q10. Skip on Condition Ask the user to enter a number from 1 to 20. Print all numbers from 1 to 20 except the number entered by the user using `continue`.**

user\_input = int(input("Enter a number between 1 and 20: "))

print("Numbers from 1 to 20 excluding", user\_input, ":")

for i in range(1, 21):

    if i == user\_input:

        continue

    print(i)