# WASIF HAJU ASSIGNMENT 8

**Q1) Given a range of the first 10 numbers, Iterate from the start number to the end number, and In each iteration print the sum of the current number and previous number**

assignment8/question1.py

```
def range1(num):
    lastNum = 0
    for i in range(num):
        sum = lastNum + i
        print("Current Number:", i, "Previous Number: ", lastNum,"
        Sum: ", sum)
        previousNum = i

print("The output is: ")
range1(10)
```

Console Shell

```
The output is:
Current Number: 0 Previous Number:  0  Sum:  0
Current Number: 1 Previous Number:  0  Sum:  1
Current Number: 2 Previous Number:  0  Sum:  2
Current Number: 3 Previous Number:  0  Sum:  3
Current Number: 4 Previous Number:  0  Sum:  4
Current Number: 5 Previous Number:  0  Sum:  5
Current Number: 6 Previous Number:  0  Sum:  6
Current Number: 7 Previous Number:  0  Sum:  7
Current Number: 8 Previous Number:  0  Sum:  8
Current Number: 9 Previous Number:  0  Sum:  9
>
```

**Q2) Take list of numbers from users, return True if first and last number of a list is same.**

assignment8/question2.py

```
def quest2(numList):
    firstElement = numList[0]
    lastElement = numList[-1]
    if (firstElement == lastElement):
        return True
    else:
        return False

n = int(input("ENTER THE NUMBER OF LIST: "))
numList = []
for i in range(n):
    element = int(input("ENTER THE ELEMENTS: "))
    numList.append(element)

print("The Result is: ", quest2(numList))

```

Console Shell

```
ENTER THE NUMBER OF LIST: 6
ENTER THE ELEMENTS: 10
ENTER THE ELEMENTS: 20
ENTER THE ELEMENTS: 30
ENTER THE ELEMENTS: 40
ENTER THE ELEMENTS: 50
ENTER THE ELEMENTS: 10
The Result is:  True
>
```

**Q3) Print the following pattern**

**1**
**2 2**
**3 3 3**
**4 4 4 4**
**5 5 5 5 5**

assignment8/question3.py

```
rows = 6
for a in range(rows):
    for b in range(a):
        print(a, end=' ')
    print('')

```

Console Shell

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
>
```

## Q4) Write a code to extract each digit from an integer, in the reverse order.

assignment8/question4.py

```
num = int(input("Enter the number to be reversed: "))
rev_num = 0

while (num > 0):

    remainder = num % 10
    rev_num = (rev_num * 10) + remainder
    num = num // 10

print("The Reverse Number is : {}".format(rev_num))

```

Console Shell

```
Enter the number to be reversed: 0283651
The Reverse Number is : 156382
>
```

## Q5) Create a function that returns the area of a square.

assignment8/question5.py

```
def areaOfSquare(side):
    return side*side

print("Enter The Side Length of Square: ", end="")
l = float(input())
a = areaOfSquare(l)
print("\nArea = {:.2f}".format(a))
```

Console Shell

```
Enter The Side Length of Square: 99

Area = 9801.00
>
```

## Q6) Print First 10 prime numbers.

assignment8/question6.py

```
def Prime(n):
    for i in range(2,n//2+1):
        if(n%i==0):
            return(0)
    return(1)

N=int(input("Enter Number:"))
i=2
lst=[]
while(1):
    if(Prime(i)):
        lst.append(i)
        if(len(lst)==N):
            break
    i+=1
print("First "+str(N)+" Prime numbers are:",end="")
print(*lst)
```

Console Shell

```
Enter Number:10
First 10 Prime numbers are:2 3 5 7 11 13 17 19 23 29
>
```

## Q7) Accept number from user and calculate the sum of all numbers from 1 to a given number.

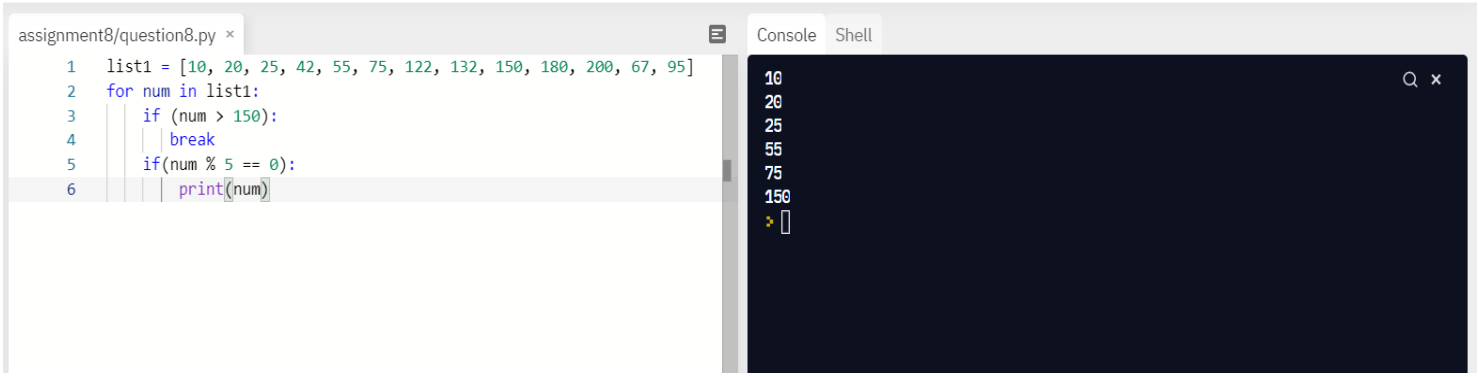
assignment8/question7.py

```
n = int(input("Enter Number whose sum needs to be calculated:"))
sum = 0
for number in range(1, n + 1, 1):
    sum = sum + number
print("Sum from 1 to given number is: ",sum)
```

Console Shell

```
Enter Number whose sum needs to be calculated:50
Sum from 1 to given number is:  1275
>
```

**Q8) Given a list, iterate it, and display numbers divisible by five, and if you find a number greater than 150, stop the loop iteration.**



**Q9) Write an SQL query to fetch unique values of DEPARTMENT from Worker table.**

**Ans:** SELECT DISTINCT DEPARTMENT FROM WORKER ;

**Q10) Write an SQL query to print all Worker details from the Worker table order by FIRST_NAME Ascending.**

**Ans:** SELECT * FROM WORKER ORDER BY FIRST_NAME ASC ;

**Q11) Write an SQL query to print all Worker details from the Worker table order by FIRST_NAME Ascending and DEPARTMENT Descending.**

**Ans**: SELECT * FROM WORKER ORDER BY FIRST_NAME ASC, DEPARTMENT DESC ;

**Q12) Write an SQL query to print details for Workers with the first name as "Vipul" and "Satish" from Worker table.**

**Ans:** SELECT * FROM WORKER WHERE FIRST_NAME IN ('Vipul' , 'Satish) ;

**Q13) Write an SQL query to print details of workers excluding first names, "Vipul" and "Satish" from Worker table.**

**Ans:** SELECT * FROM WORKER WHERE FIRST_NAME NOT IN ('Vipul' , 'Satish') ;

**Q14) Write an SQL query to print details of Workers with DEPARTMENT name as "Admin"**

**Ans:** SELECT * FROM WORKER WHERE DEPARTMENT LIKE 'ADMIN%' ;