

```
In [1]: 1 #Q1 Create a python program to read a year from user, find whether that year is a leap year.
2 #year: - It should be divisible by four.
3 #If it's a century year, it should be divisible by 400 also.)
4 year = int(input("Enter the year : "))
5 if year % 4 == 0 and year % 100 != 0 or year % 400 == 0:
6     print ("Leap")
7 else:
8     print ("Not Leap")
```

Enter the year : 2204
Leap

```
In [2]: 1 #Q2 Create a python program to read a number from user, and check whether it is a palindrome or not.
2 #proper message back to user.
3 n = input("Enter the Number:")
4 number_str = str(n)
5 reversed_number = number_str[::-1]
6 if number_str == reversed_number:
7     print("It is palindrome!")
8 else:
9     print("It is not a palindrome!")
```

Enter the Number:543345
It is palindrome!

```
In [3]: 1 #Q3 Create a python program to demonstrate the use of while loop in python
2 #Addition of first 10 Natural numbers
3 counter = 1
4 add = 0
5 while counter <= 10:
6     add = add + counter
7     counter = counter + 1
8 else:
9     print('Addition = ',add)
```

Addition = 55

```
In [4]: 1 #Q4 Create a python program to demonstrate the use of string functions.
2 text = " Hello, This is Python Practical 1! "
3 print("Original text",text )
4
5 # 1. Uppercase
6 uppercase = text.upper()
7 print("Uppercase: ", uppercase)
8
9 # 2. Lowercase
10 lowercase = text.lower()
11 print("Lowercase: ", lowercase)
12
13 # 3. Split
14 split_text = text.split(",")
15 print("Split text: ", split_text)
16
17 # 4. Startswith
18 starts_with = text.startswith("Hello")
19 print("Starts with 'Hello': ", starts_with)
20
21 # 5. Endswith
22 ends_with = text.endswith("World! ")
23 print("Ends with 'World! ': ", ends_with)
24
25 # 6. Find
26 find = text.find("Python")
27 print("Word found at location : ",find)
28
29 # 7. Replace
30 replace = text.replace("Python","PDS")
31 print("Sentence after replacing the word : ",replace)
32
```

```
Original text   Hello, This is Python Practical 1!
Uppercase:      HELLO, THIS IS PYTHON PRACTICAL 1!
Lowercase:      hello, this is python practical 1!
Split text:     [' Hello', ' This is Python Practical 1! ']
Starts with 'Hello': False
Ends with 'World! ': False
Word found at location : 17
Sentence after replacing the word :   Hello, This is PDS Practical 1!
```

```
In [5]: 1 #Q5 Write a program to accept 'n' numbers from user store in list. Separat
2 arr=[] #Creating Empty list
3 even=[]
4 odd=[]
5 n = int(input('How many elements?'))
6
7 for x in range(n):
8     num=int(input('Enter elements of list:'))
9     arr.append(num)
10
11 print('List elements are',arr )
12 lst=[]
13 for i in arr:
14     cnt=arr.count(i)
15     lst.append(cnt)
16 print(lst)
17 for i in arr:
18     if i%2==0:
19         even.append(i)
20     else:
21         odd.append(i)
22 print("Even",even)
23 print("Odd",odd)
```

```
How many elements?3
Enter elements of list:2
Enter elements of list:3
Enter elements of list:1
List elements are [2, 3, 1]
[1, 1, 1]
Even [2]
Odd [3, 1]
```