Practical No. 1

* What do the following string methods do?
  - lower
  - count
  - replace

Ans - a) Lower function

Lower function will convert the given string in small letter.

```
a = "Hello, World!"
print(a.lower())
```

Output :

hello, world!

b) count function

count method returns an integer that denotes number of times a substring occurs in a given string.

```
a = "Hello, World! Hello, Python"
print (a.count("Hello"))
```

Output :

2

c) replace function

The replace method replaces a string with another string.

```
a = "Hello, World!"
print (a.replace("H", "J"))
```

Output:

Jello, World!

Practical No. 2

* Write instructions to perform each of the steps below:

(a) Create a string containing atleast five words and store it in a variable.

(b) Print out the string.

(c) Convert the string to a list of words using the string split method.

(d) Sort the list into reverse alphabetical order using some of the list methods.

(e) Print out the sorted, reversed list of words.

Answer:

```
# creating string to store five words
a = "Apple, Orange, Banana, Mango, Grapes"
# printing string
print(a)
# splitting the string
b = a.split(",")
# printing splitted string
print(b)
# sorting the list in reverse order
b.sort(reverse = True)
# printing the reverse list
print(b)
```

Output:

Apple, Orange, Banana, Mango, Grapes
['Apple', 'Orange', 'Banana', 'Mango', 'Grapes']
['Orange', 'Mango', 'Grapes', 'Banana', 'Apple']

Practical No. 3

* Write a program that determines whether the number is prime.

Answer:

```
# to check whether a number is prime no. or not prime no.
n = int(input("Enter a number"))
r = 2
while (r<n):
    if (n%r) == 0:
        print(n," is not a prime no")
        break;
        r = r+1
    if (n==r):
        print(n," is a prime no")
```

Output:

```
Enter a number 8
8 is not a prime no

Enter a number 7
7 is a prime no
```

Practical No. 4

* Find all numbers which are multiple of 17, but not multiple of 5, between 2000 and 2500.

Answer:

```
# numbers which are multiple of 17, but not the
#multiple of 5, between 2000 and 2500
print("numbers multiple of 17, but not multiple of 5,
  between 2000 and 2500")
for i in range(2000, 2501):
    if (i%17==0) and (not(i%5==0)):
        print(i)
```

Output:

numbers multiple of 17, but not the multiple of 5, between 2000 and 2500

2006	2227	2431
2023	2244	2448
2057	2261	2482
2074	2278	2499
2091	2312	
2108	2329	
2142	2346	
2159	2363	
2176	2397	
2193	2414	

Practical No. 5

Output :

```
enter a no 5
enter 2nd no 6
Swapped value of a = 6
Swapped value of b = 5
Verifying the result
enter a no 5
enter 2nd no 6
Swapped value of a = 6
Swapped value of b = 5
```

Practical No. 5

* Swap two integer numbers using a temporary variable. Repeat the exercise using the code format : a, b = b, a. Verify your results in both the cases.

Answer:

```
a = int (input (" enter a no"))
b = int (input (" enter 2nd no"))
c = a
a = b
b = c
print (" Swapped value of a =", a)
print (" Swapped value of b =", b)
print (" Verifying the result")
a = int (input (" enter a no"))
b = int (input (" enter 2nd no"))
a, b = b, a
print (" Swapped value of a =", a)
print (" Swapped value of b =", b)
```

Practical No. 6

* Find the largest of n numbers, using a user defined function largest().

Answer:

```
def largest (arr, n):
    max = arr [0]
    for i in range (1, n):
        if (arr [i] > max):
            max = arr[i]
    return max
arr = [10, 324, 45, 90, 9808]
n = len(arr)
Ans = largest (arr, n)
print ("Largest in given array is", Ans)
```

Output:

Largest in given array is 9808.

Practical No. 7

* Write a function myReverse() which receives a string as an input and returns the reverse of the string. Check if a given string is palindrome or not.

Answer :

```
def myReverse(s):
    return s[::-1]

def isPalindrome(s):
    rev = myReverse(s)
    if (s == rev):
        return True
    return False
s = input("Enter name")
ans = isPalindrome(s)
if ans == 1:
    print("Yes")
else:
    print("No")
```

Output :

```
Enter Name Nitin
Yes
```

Practical No. 8

* WAP to convert Celsius to Fahrenheit

Answer:

```
celsius = int(input("Enter the temperature in celcius:"))
f = (celsius * 1.8) + 32
print("Temperature is farenheit is:", f)
```

Output:

```
Enter the temperature in celsius: 32
Temperature in farenheit is: 89.6
```

Practical No. 9

Find the ASCII value of characters.

Answer:

```
c = input ("Enter a character: ")
print ("The ASCII value of '" + c + "' is", ord(c))
```

Output:

```
Enter a character : A
The ASCII value of 'A' is 65
```

Practical No. 10

WAP for simple calculator.

Answer:

```
def add(x,y):
    """This function adds two numbers"""
    return x+y
def subtract(x,y):
    """This function subtracts two numbers"""
    return x-y
def multiply(x,y):
    """This function multiplies two numbers"""
    return x*y
def divide(x,y):
    """This function divides two numbers"""
    return x/y
# take input from the user
print("Select operation:")
print("1. Add")
print("2. Subtract")
print("3. Multiply")
print("4. Divide")
choice = input("Enter choice(1/2/3/4):")
num1 = int(input("Enter first number:"))
num2 = int(input("Enter second number:"))
if choice == '1':
```

```
print (num1, "+", num2, "=", add (num1, num2))
elif choice == '2'
print (num1, "-", num2, "=", subtract (num1, num2))
elif choice == '3':
print (num1, "*", num2, "=", multiply (num1, num2))
elif choice == '4':
 print (num1, "/", num2, "=", divide (num1, num2))
else:
print ("Invalid input")
```

Output:

```
Select operation:
1. Add
2. Subtract
3. Multiply
4. Divide
Enter choice (1/2/3/4): 1
Enter first number : 2
Enter second number : 3
2 + 3 = 5
```