

GOVT PRACTICAL EXAMINATION - 2024-2025

NAME :

REG.NO :

STD :

SUBJECT :

DATE :

SESSION :

BATCH :

Padasalai

QUESTION - 1

Program: 1 [a]

Write a program to calculate the factorial of the given number using for loop (Don't use built-in function factorial).

Aim:

❖ To calculate the factorial of the given number using for loop.

Coding:

```
num = int(input('Enter a Number: '))
fact = 1
for i in range(1,num+1):
    fact = fact * i
print("Factorial of ", num, " is ", fact)
```

Output:

Enter a Number: 5
Factorial of 5 is 120

Result:

Thus the Python program to calculate factorial has been done and the output is verified.

Program: 1 [b]

Write a program to sum the series $1^1/1 + 2^2/2 + 3^3/3 + \dots + n^n/n$

Aim:

❖ To calculate the sum of the series : $1^1/1 + 2^2/2 + 3^3/3 + \dots + n^n/n$

Coding:

```
n = int(input("Enter a value of n: "))
s = 0
for i in range(1,n+1):
    a = (i**i)/i
    s=s+a
print("The sum of the series is ", s)
```

Output:

Enter a value of n: 4
The sum of the series is 76

Result:

Thus the Python program to sum of the series has been done and the output is verified.

[OR]

Program: 6

- ❖ Create an Employee Table with the fields Empno, Empname, Desig, Dept, Age and Place. Enter five records into the table.
- ❖ Add two more records to the table.
- ❖ Modify the table structure by adding one more field namely date of joining.
- ❖ Check for Null value in doj of any record.
- ❖ List the employees who joined after 01/01/2018.

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QUESTION - 2**Program: 2 [a]**

Write a program using functions to check whether a number is even or odd.

Aim:

❖ To check whether a number is even or odd using user defined function.

Coding:

```
def oddeven(a):
    if (a%2==0):
        return "Even"
    else:
        return "Odd"
num = int(input("Enter a number: "))
print("The given number is ", oddeven(num))
```

Output:

```
Enter a number: 7
The given number is Odd
Enter a number: 6
The given number is Even
```

Result:

❖ Thus the Python program to check whether a number is odd or even has been done and the output is verified.

Program: 2 [b]

Write a program to create reverse of the given string. For example, "wel" = "lew". (Don't use string slice with stride operation)

Aim:

❖ To create a reverse of the given string

Coding:

```
def reverse(str1):
    str2=""
    for i in str1:
        str2 = i + str2
    return str2
word = input("\n Enter a String: ")
print("\n The reverse of the given string is: ", reverse(word))
```

Output:

```
Enter a String: school
The reverse of the given string is: loohcs
```

Result:

❖ Thus the Python program to reverse the string has been done and the output is verified.

[OR]

Program: 7

Create a table student table.

QUESTION - 3**Program: 3**

Write a program to generate values from 1 to 10 and then remove all the odd numbers from the list.

Aim:

❖ To generate values from 1 to 10 and then remove all the odd numbers from the list.

Coding:

```
num = list(range(1,11))
print("Numbers from 1 to 10.....\n",num)
for i in num:
    if(i%2 == 1):
        num.remove(i)
print("The values after removing odd numbers.....\n",num)
```

Output:

Numbers from 1 to 10.....
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
The values after removed odd numbers.....
[2, 4, 6, 8, 10]

Result:

❖ Thus the Python program to generate values from 1 to 10 and then remove all the odd numbers from the list has been done and the output is verified.

[OR]

Program: 8

Write a program using python to get 10 players name and their score. Write the input in a csv file. Accept a player name using python. Read the csv file to display the name and the score. If the player name is not found give an appropriate message.

QUESTION - 4**Program: 4**

Write a Program that generate a set of prime numbers and another set of odd numbers.

Display the result of union, intersection, difference and symmetric difference operations.

Aim:

- ❖ To generate a set of prime numbers and another set of odd numbers, and to display the result of union, intersection, difference and symmetric difference operations.

Coding:

```
odd = set(range (1,10,2))
prime=set()
for i in range(2,10):
    for j in range (2,i):
        if (i%j==0):
            break
        else:
            prime.add(i)
print("Odd Numbers: ", odd)
print("Prime Numbers: ", prime)
print("Union: ", odd.union(prime))
print("Intersection: ", odd.intersection(prime))
print("Difference: ", odd.difference(prime))
print("Symmetric Difference: ", odd.symmetric_difference(prime))
```

Output:

Odd Numbers: {1, 3, 5, 7, 9}

Prime Numbers: {2, 3, 5, 7}

Union: {1, 2, 3, 5, 7, 9}

Intersection: {3, 5, 7}

Difference: {1, 9}

Symmetric Difference: {1, 2, 9}

Result:

- ❖ Thus the Python program to generate prime numbers and set operations has been done and the output is verified.

[OR]

Program: 9

Create a sql table using python and accept 10 names and age .sort in descending order of age and display.

QUESTION - 5**Program: 5**

Write a program to accept a string and print the number of uppercase, lowercase, vowels, consonants and spaces in the given string using Class.

Aim:

- ❖ To accept a string and print the number of uppercase, lowercase, vowels, consonants and spaces in the given string using Class.

Coding:

```
class String:
    def __init__(self):
        self.upper=0
        self.lower=0
        self.vowel=0
        self.consonant=0
        self.space=0
        self.string=""
    def getstr(self):
        self.string=str(input("Enter a String: "))
    def count(self):
        for ch in self.string:
            if (ch.isupper()):
                self.uppercase+=1
            if (ch.islower()):
                self.lowercase+=1
            if (ch in ('AEIOUaeiou')):
                self.vowel+=1
            if (ch==" "):
                self.spaces+=1
        self.consonant=self.upper+self.lower-self.vowel
    def display(self):
        print("The given string contains...")
        print("%d Uppercase letters"%self.upper)
        print("%d Lowercase letters"%self.lower)
        print("%d Vowels"%self.vowel)
        print("%d Consonants"%self.consonant)
        print("%d Spaces"%self.space)
```

```
S = String()
S.getstr()
S.execute()
S.display()
```

Output:

```
Enter a String: Welcome to Computer Science
The given string contains...
3 Uppercase letters
21 Lowercase letters
10 Vowels
14 Consonants
3 Spaces
```

Result:

- ❖ Thus the Python program to display a string elements – using class has been done and the output is verified.

[OR]

Program: 10

Write a program to get five marks using list and display the marks in pie chart.