

**Practical No.1: Python Program for Pascal Triangle:**

```
rows = int(input("Enter number of rows: "))
for i in range(rows):
    for j in range(i + 1):
        print(j + 1, end=" ")
    print()
```

**Practical No.2: Find out Roots of Quadratic Equations**

```
from math import sqrt
import cmath
a=int(input("enter the number a: "))
b=int(input("enter the number b: "))
c=int(input("enter the number c: "))
d=(b**2)-(4*a*c)
root1=(-b-cmath.sqrt(d))/(2*a)
root2=(-b+cmath.sqrt(d))/(2*a)
print("the roots are ", root1 , root2)
```

**Practical No.3: Program to display Fibonacci series**

```
a=0
b=1
num=int(input("enter a number"))
if num==1:
    print(a)
else:
    print(a)
    print(b)
    for i in range(2,num):
        c=a+b
        a=b
        b=c
    print(c)
```

**Practical No.04: To check the given number is Palindrome or Not**

```
value = input("Enter a number: ")
reversed_value=value[::-1]
if value ==reversed_value:
    print("The number is a palindrome!")
else:
    print("Not a palindrome!")
```

**Practical No.05: To find the sum of digits of a given number:**

```
number = input("Enter a number: ")
sum_of_digits = 0
for digit in number:
    sum_of_digits=sum_of_digits + int(digit)
print("The sum of the digits in the number is:", sum_of_digits)
```

**Practical No. 06: Python program to remove the punctuations from a string.**

```
punctuation = ""!"()-[]{};:'"\.,<>./?@#$$%^&* _~""
string = input("Enter a string: ")
no_punct = ""
for char in string:
    if char not in punctuation:
        no_punct = no_punct + char
print(no_punct)
```

**Practical No.07: Python program to implement the simple calculator**

```
a=float(input("enter first number: "))
b=float(input("enter second number: "))
print("please select the operation")
print("1.add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
choice=int(input("select choice from 1 to 4: "))
if choice==1:
    print(a+b)
elif choice==2:
    print(a-b)
elif choice==3:
    print(a*b)
elif choice==4:
    print(a/b)
else:
    print("invalid input")
```

**Practical No.08: Python program for reverse string:**

```
string = input("Enter a string: ")
rev_string=(string[::-1])
print("original string is: ", string)
print("reversed string is: ", rev_string)
```

**Practical No.09: Python Program implementation of the Anonymous Function Lambda.**

```
# Example of a lambda function
multiply = lambda x, y: x * y
```

```
# Using the lambda function
result = multiply(4, 6)
print("Result:", result)
```