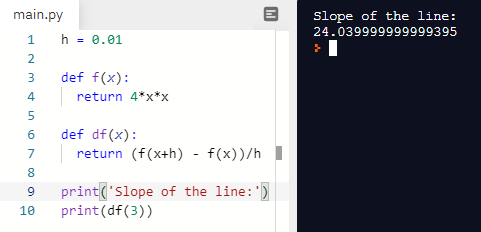
**Lab Task 1**

**Numerical Computing Lab(105127)**

**Ali Afzal(63961)**

Q1:



Q2:

**Transcendental Equation:**

Equations having trigonometric ratios, exponential

functions or logarithmic values are called transcendental equations.

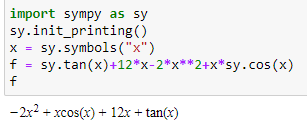
1. import sympy as sy

sy.init\_printing()

x = sy.symbols("x")

f = sy.tan(x)+12\*x-2\*x\*\*2+x\*sy.cos(x)

f



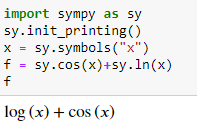
1. import sympy as sy

sy.init\_printing()

x = sy.symbols("x")

f = sy.cos(x)+sy.ln(x)

f



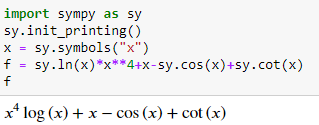
1. import sympy as sy

sy.init\_printing()

x = sy.symbols("x")

f = sy.ln(x)\*x\*\*4+x-sy.cos(x)+sy.cot(x)

f



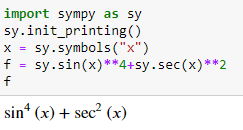
1. import sympy as sy

sy.init\_printing()

x = sy.symbols("x")

f = sy.sin(x)\*\*4+sy.sec(x)\*\*2

f



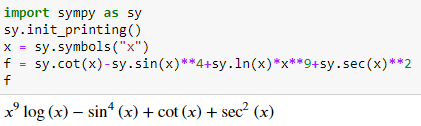
1. import sympy as sy

sy.init\_printing()

x = sy.symbols("x")

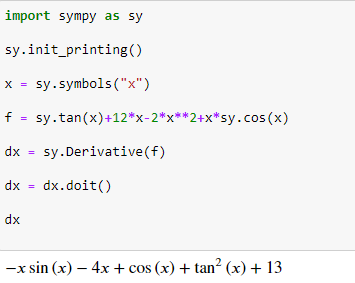
f = sy.cot(x)-sy.sin(x)\*\*4+sy.ln(x)\*x\*\*9+sy.sec(x)\*\*2

f

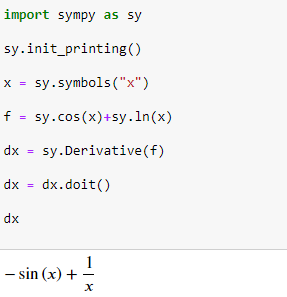


Q3:

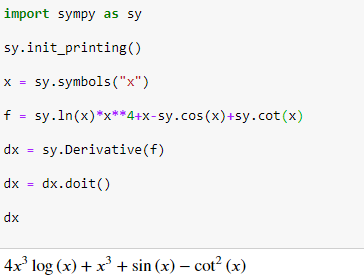
A)



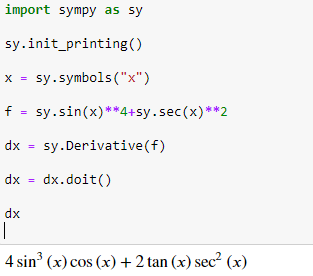
B)



C)



D)



E)

