

TASK 1:-

```
def multiply(a, b):  
    return a * b  
  
print("Multiplication =", multiply(4, 5))
```

```
def even_odd(num):  
    if num % 2 == 0:  
        return "Even"  
    else:  
        return "Odd"  
  
print(even_odd(7))
```

```
def maximum(a, b, c):  
    return max(a, b, c)  
  
print("Maximum number =", maximum(10, 25, 15))
```

```
def factorial(n):  
    fact = 1  
    for i in range(1, n + 1):  
        fact = fact * i  
    return fact  
  
print("Factorial =", factorial(5))
```

```
def count_vowels(text):
    count = 0
    for ch in text:
        if ch in "aeiouAEIOU":
            count += 1
    return count

print("Vowels count =", count_vowels("Python Programming"))
```

```
def reverse_string(text):
    return text[::-1]

print("Reversed string =", reverse_string("Python"))
```

```
def is_prime(num):
    if num <= 1:
        return "Not Prime"
    for i in range(2, num):
        if num % i == 0:
            return "Not Prime"
    return "Prime"

print(is_prime(7))
```

```
def greet(name="Student"):
```

```
print("Hello", name)

greet()
greet("Alice")

def student_info(name, age):
    print("Name:", name)
    print("Age:", age)

student_info(age=25, name="abc")

def fibonacci(n):
    if n <= 1:
        return n
    else:
        return fibonacci(n - 1) + fibonacci(n - 2)

print("Fibonacci series:")
for i in range(6):
    print(fibonacci(i), end=" ")

square = lambda x: x * x
print("\nSquare =", square(6))
```

```
PS C:\Users\Adnan> python -u C:\Users\Adnan\Downloads\8.py
● Multiplication = 20
Odd
Maximum number = 25
Factorial = 120
Vowels count = 4
Reversed string = nohtyP
Prime
Hello Student
Hello Alice
Name: abc
Age: 25
Fibonacci series:
0 1 1 2 3 5
Square = 36
○ PS C:\Users\Adnan> []
```

TASK 2:-

try:

```
a = int(input("Enter numerator: "))

b = int(input("Enter denominator: "))

result = a / b

print("Result =", result)

except ZeroDivisionError:

    print("Error: Cannot divide by zero")
```

try:

```
num = int(input("Enter a number: "))

print("You entered:", num)

except ValueError:

    print("Error: Please enter a valid integer")
```

try:

```
x = int(input("Enter a number: "))

print("Square =", x * x)

except:

    print("Error occurred")
```

try:

```
num = int(input("Enter a number: "))

except ValueError:

    print("Invalid input")

else:

    print("Number entered:", num)

    print("Square =", num * num)

try:

    a = int(input("Enter first number: "))

    b = int(input("Enter second number: "))

    print("Division =", a / b)

except ZeroDivisionError:

    print("Cannot divide by zero")

finally:

    print("Program execution completed")
```

```
try:

    a = 10

    b = "Python"

    print(a + b)

except TypeError:

    print("Error: Cannot add integer and string")
```

```
try:

    num = int(input("Enter a number: "))

    result = 10 / num

    print("Result =", result)

except (ValueError, ZeroDivisionError):
```

```
print("Error: Invalid input or division by zero")

age = int(input("Enter age: "))

if age < 18:

    raise Exception("Age must be 18 or above")

else:

    print("Eligible to vote")
```

```
PS C:\Users\adnan> python -u "c:\Users\adnan\Downloads\8.py"
● Enter numerator: 5
Enter denominator: 1
Result = 5.0
Enter a number: 45
You entered: 45
Enter a number: 3
Square = 9
Enter a number: 7
Number entered: 7
Square = 49
Enter first number: 1
Enter second number: 9
Division = 0.1111111111111111
Program execution completed
Error: Cannot add integer and string
Enter a number: 5
Result = 2.0
Enter age: 23
Eligible to vote
```