

**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\6.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 -i 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
PS C:\Users\adnan>
```