



Artificial Intelligence

(Course Code: **CSC262**)

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Lab # 1

Lab Task – 1

```
str = input("Enter a string you want to reverse: ")

reversed_str = ""
for i in range(len(str) - 1, -1, -1):
    reversed_str += str[i]

print("Reversed string is:", reversed_str)
```

Output:

```
Enter a string you want to reverse: Aima
```

```
Reversed string is: amiA
```

```
PS C:\Users\AIMAF\Desktop\UniversitySubjects\AI> █
```

Lab Task – 2

```
even_sum = 0
odd_sum = 0

n = int(input("How many numbers do you want to enter? "))

for i in range(n):
    num = int(input(f"Enter number {i+1}: "))
    if num % 2 == 0:
        even_sum += num
    else:
        odd_sum += num

print("Sum of even numbers =", even_sum)
print("Sum of odd numbers =", odd_sum)
```

Output:

```
How many numbers do you want to enter? 3
Enter number 1: 1
Enter number 2: 2
Enter number 3: 3
Sum of even numbers = 2
Sum of odd numbers = 4
PS C:\Users\AIMAF\Desktop\UniversitySubjects\AI> █
```

Lab Task – 3

```
terms = int(input("Enter the number of terms: "))

a, b = 0, 1
print("Fibonacci Series:")

for i in range(terms):
    print(a, end=" ")
    a, b = b, a + b
```

Output:

```
Enter the number of terms: 3
Fibonacci Series:
0 1 1
PS C:\Users\AIMAF\Desktop\UniversitySubjects\AI> █
```

Lab Task – 4

```
marks = int(input("Enter marks (1-100): "))

if marks < 50:
    grade = "F"
elif marks <= 60:
    grade = "E"
elif marks <= 70:
    grade = "D"
elif marks <= 80:
    grade = "C"
elif marks <= 90:
    grade = "B"
elif marks <= 100:
    grade = "A"
else:
    grade = "Invalid input"

print("Grade:", grade)
```

Output:

```
Enter marks (1-100): 97
Grade: A
PS C:\Users\AIMAF\Desktop\UniversitySubjects\AI>
```

Lab Task – 5

```
n = int(input("Enter a number: "))
fact = 1

for i in range(1, n + 1):
    fact *= i

print("Factorial of", n, "is", fact)
```

Output:

```
Enter a number: 6
Factorial of 6 is 720
PS C:\Users\AIMAF\Desktop\UniversitySubjects\AI>
```