IARE

INSTITUTE OF AERONAUTICAL ENGINEERING

(An Autonomous Institute affiliated to JNTUH, Hyderabad)

Dundigal, Hyderabad - 500 043

LABORATORY WORK BOOK

Name of the Student : HIMAKAR CHAPPIDI

Class : CSE-B Semester : VI

Course Code : Course Name : SQAT Laboratory

Roll Number									
2	1	9	5	1	A	0	5	6	5

Name of the Course Faculty : Mr. ACHYUTHA SURESH BABU Faculty ID : IARE 10996

Exercise Number : Week Number : 07 Date : 6/6/24

S. No.	Exercise Number	EXERCISE NAME	MARKS AWARDED						
			Aim/ Preparation	Algorithm / Procedure / Performance in the Lab		Source Code / Calculations and Graphs	Program Execution / Results and Error Analysis	Viva - Voce	Total
			4	4		4	4	4	20
1	7.1	Area of a Rectangle	4		4	4	4	4	20
2	7.2	Students' Grades Based on							
3		their scores							
4	7.3	Factorial of a							
5		Given Number							
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Signature of the Student

Signature of the Faculty

7.1 Area of a Rectangle Problem

Design and develop a program that calculates the area of a rectangle. The program takes input for length and width, calculates the area and then outputs the result.

Program:

```
l = int(input('Enter length of Rectangle: '))
b = int(input('Enter breadth of Rectangle: '))
Print('Area of Rectangle is: ', l * b)
```

OUTPUT:

```
Enter length of Rectangle: 10
Enter breadth of Rectangle: 60
Area of Rectangle is : 600
```

Test-case-2:

```
Enter length of Rectangle: 5
Enter breadth of Rectangle : 5
Area of Rectangle is: 25
```

ROLL NUMBER :

7.2 Students' Grades Based on their scores

Design & develop a Program that categorizes students' grades based on their scores.

Program:

```
S = int(input('Enter score of student: '))
if S >= 90:
    Print('Grade = A')
elif S >= 80:
    Print('Grade = B')
elif S >= 70:
    Print('Grade = C')
elif S >= 60:
    Print('Grade = D')
elif S >= 50:
    Print('Grade = E')
else:
    Print('Fail')
```

OUTPUT:

Testcase-1:

Enter score of student: 80

Grade = B

7.3 Factorial of a Given Number

Design & develop a program that calculates factorial of a given number.

Program:

```
from math import factorial
n = int(input('Enter integer to find
                factorial: '))
print('Factorial of given number is: ',
                factorial(n))
```

OUTPUT:

Testcase-1:

Enter integer to find factorial: 5

Factorial of given number is: 120

Test case-2:

Enter integer to find factorial : 6

Factorial of given number is: 720