LAB ASSIGNMENTS
PYTHON PROGRAMMING LAB
MCA 1 Year 1 Semester, 2023
Subject Code: MCA1152

Day 1

1. i) Write a script that reads two integers, and prints the average of the two numbers.
   ii) Modify 1.i) to print the larger of the two numbers.

2. Write a script that reads three floating point numbers, and does the following:
   i) It prints the smallest and largest among the three.
   ii) It prints the average of the three numbers up to 2 decimal places.

3. Write a script that prompts the user to input a year and determine whether that year is a leap year or not.

4. Write scripts to print each of the following output pattern. The number of rows to be printed is to be accepted as user input.

i)
```
*
*  *
*  *  *
*  *  *  *
*  *  *  *  *
*  *  *  *  *  *
*  *  *  *  *  *  *
```

ii)
```
*  *  *  *  *  *  *
   *  *  *  *  *  *
      *  *  *  *  *
         *  *  *  *
            *  *  *
               *  *
                  *
```

iii)
```
*  *  *  *  *  *  *
*  *  *  *  *  *
*  *  *  *  *
*  *  *  *
*  *  *
*  *
*
```

iv)
```
                  *
               *  *
            *  *  *
         *  *  *  *
      *  *  *  *  *
   *  *  *  *  *  *
*  *  *  *  *  *  *
```

v)
```
*
*  *
*  *  *
*  *  *  *
*  *  *
*  *
*
```

vi)
```
      *
   *  *
*  *  *
*  *  *  *
*  *  *
*  *
   *
```

vii)
```
*  *  *  *  *  *  *
   *  *  *  *  *
      *  *  *
         *
```

viii)
```
      *
   *  *  *
*  *  *  *  *
*  *  *  *  *  *  *
```

ix)
```
*                 *
*  *           *  *
*  *  *     *  *  *
*  *  *  *  *  *  *
*  *  *     *  *  *
*  *           *  *
*                 *
```

x)
```
*  *  *  *  *  *  *
*  *  *  *  *
   *  *  *
      *
   *  *  *
*  *  *  *  *
*  *  *  *  *  *  *
```

xi)
```
         *
      *  *  *
   *  *  *  *  *
*  *  *  *  *  *  *
   *  *  *  *  *
      *  *  *
         *
```

xii)
```
*  *  *  *  *  *  *
*  *  *     *  *  *
*  *           *  *
*                 *
*  *           *  *
*  *  *     *  *  *
*  *  *  *  *  *  *
```

xiii)
```
         *
      *  *
   *  *  *
*  *  *  *  *  *  *
   *  *  *
      *  *
         *
```

xiv)
```
      *
   *  *
   *  *  *
*  *  *  *  *  *  *
   *  *  *
   *  *
      *
```

xv)
```
   *  *  *  *  *              *
      *  *  *  *           *  *
         *  *  *        *  *  *
            *  *  *  *  *  *
   *  *  *  *  *  *  *  *  *
   *  *  *  *  *  *
   *  *  *        *  *  *
   *  *              *  *  *  *
   *                    *  *  *  *  *
```