Assignment 1:

Using switch case, write a menu driven program to find the sum of the following series and display sum for each case:

i) S=1+(1*3) + (1*3*5) + (1*3*5*7) +....................+ (1*3*5*7*........*(2n-1))

ii) S=(1/a) + (2/a^3) + (3/a^5) + (4/a^7) + ...+ (n/a^n)

Assignment 2:

Define a class TwoD which contains the following methods:

i) void rect(int L, int B)   - Calculate the area of the rectangle

ii) void circ(int R)   - Calculate the area of circle.

Invoke both the methods from main function and display the area of both rectangle and circle.

Assignment 3:

Create a class to print the following output by using method overloading. Write main function also.

i) void pattern (int a, int b)- To draw the following pattern from a to b

  sample input: a=1 and b=10

  sample output:

```
          1
       2   3
     4   5   6
   7   8   9   10
```

ii) void pattern (char c) – To draw the following pattern with a symbol.

Sample input: $

Sample output:

```
     $
    $$
   $$$
  $$$$
```

Instructions to be followed:

1. All assignments must be hand-written. No part of the assignment will be typed in computer. Project file paper will be used to do the assignments.

2. Program and variable description table on rule side with black or blue pen only. White pages can be used for writing sample input and output. No other colour will be acceptable.

3. Each assignment will be scanned as a pdf file.

4. Following sequence will be maintained in a scanned pdf file for each assignment:

      a) Question

      b) Program

      c) Sample Input and output

      d) Variable description Table

4. PDF File Name will be as follows:

   <Registartion No><space>Assignment<no.>

Example: 2222 Samadrita Basu Assignment1

5. Subject of the mail will be as follows:

<Registration No><space><Name><space><Assignment>1,2,3

Example: 2222 Samadrita Basu Assignment 1,2,3

6. Only one mail has to be sent with three attachments for three assignments.

7. Submission date for Assignment1,2,3 will be on or before 06/09/2020