**Assignment # 2**

**Write the following programs using loops**

**Program # 1:** using while loop print the following output.

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**Program # 2:** using while loop print the following output.

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**Program # 3:** using while loop print the following output.

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**Program # 4:** using for loop print the following output.

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**Program # 5:** using for loop print the following output.

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**Program # 6:** using do-while print the following output.

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**Program # 7:** using do-While loop print the following output.

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**Program # 8**.Write a program that prints the sum, average and product of the following series

5 + 8 + 11 + …………….+ 50

**Program # 9:** Write a program to compute sum of the series 1/1! + 1/2! + .. + 1/n!

**Program # 10:** Write a program to print following sum of series.  
1/2 – 3/4 + 5/6 – 7/8 + 9/10 – 11/12 + … upto n terms.

**Program # 11:** Write a program to calculate y= 1+1/11+1/21+1/31+…..+1/n

**Program # 12:** Write a program that print the following series up to n

2 6 11 10 15 21 18 24 31 26 33 41………. n

**Program # 13:**  Write a program to print following sum of series

1+(1+2)+(1+2+3)…..n terms

**Program # 14:** Print the following using loop

10 20 30 40 30 20 10  
20 30 40 50 40 30 20  
30 40 50 60 50 40 30  
40 50 60 70 60 50 40  
50 60 70 80 70 60 50

**Program # 15:** Write a program to print the sum of series of following

1+ax-ax^2+ax^3-ax^4+………ax^n : a, x and n