Write programs in Python:

1. To print the following patterns:
   i.   # # # #
        # # #
        # #
        #

   ii.   8
         8 6
         8 6 4
         8 6 4 2

2. To print the multiplication tables of a range of numbers input by the user (by accepting the lower limit and upper limit as input). Print 5 multiples of each number in the range.

3. To find the sum of the following series:
   1/2! + 2/4! + 3/6! + ……n/(n*2)!
   (sum of 3 terms is 0.5875)

4. Write a menu driven program in Python to do the following tasks by taking choice as input from the user :
   a) Print first n odd numbers in descending order
   b) Print the series 1   4   7   10……..40
   c) Print the series 1   -4   7   -10……. -40

5. Write Python programs to display the numbers of the given series along with their sum:

   a) 2/9 – 5/13 + 8/17 …. (upto 7 terms)
   b) $1^2 + 3^2 + 5^2 + …… + n^2$ (input n)