Python Assignment -5 (Looping)

1. Write a program to prompt user to enter userid and password. If Id and password is incorrect give him chance to re-enter the credentials. Let him try 3 times. After that program to terminate.
2. Enter number of students from user. For those many students accept marks of 5 subject marks from user and calculate percentage. Display all percentage and average percentage of students.
3. Accept no. of passengers from user and per ticket cost. Then accept age of each passenger and then calculate total amount to ticket to travel for all of them based on following condition :
    a. Children below 12 = 30% discount
    b. Senior citizen (above 59) = 50% discount
    c. Others need to pay full.
4. Write a program to check if given number is Armstrong number or not.
   (Hint : 153 = 1*1*1 + 5*5*5 + 3*3*3 , 1634 = 1*1*1*1 + 6*6*6*6 + 3*3*3*3 + 4*4*4*4)
5. Write a program to accept an integer amount from user and tell minimum number of notes needed for representing that amount. (Use looping to optimize the problem)
6. Write a program to print prime numbers between 1 to 100.
7. Write a program to print first n prime numbers.
8. Write a program to solve the following series :
    a. 1! + 2! + 3! + 4! + …..n!
    b. N + N^2 + N^3+N^4 …..+N^N (here ^ means exponent)
    c. Find the sum of a geometric series from 1 to n where the common ratio is 2.
    d. S = a + a2 / 2 + a3 / 3 + …… + a10 / 10
    e. x - x2/3 + x3/5 - x4/7 + …. to n terms