2. In order to manage their funds efficiently, a person deposits an amount of money in a bank account. They withdraw a fixed portion on the fifth day of every month for their household expenses. The bank credits the interest accumulated on their balance on the last day of every month. Write a program that inputs the initial deposit made, the interest rate provided by bank, and the fixed amount withdrawn every month. Calculate the number of months the amounts the amount (including the credited interest) can be utilized.(Hint: Use a loop)

   Note: Check for boundary conditions – If the interest earned every month is greater than the fixed withdrawal amount, the program should print that message and return.

4. Write a program that finds and prints all of the prime numbers between 3 and 100. A prime number is a number that can only be divided by one and itself (i.e.,3,5,7,11,13,17,…).

   One way to solve this problem is to use a doubly-nested loop. The outer loop can iterate from 3 to 100, while the inner loop checks to see whether the counter value for the outer loop is prime. One way to decide whether the number n is prime is to loop from 2 to n-1; if any of these numbers evenly divide n, then n cannot be prime. If none of the values from 2 to n-1 evenly divide n, then n must be prime. (Note that there are several easy ways to make this algorithm more efficient.)

7. Write a program to calculate the grade point average (GPA) of a student by getting their grades for all their subjects. Grades and their grade points are

Grade S	10 points
Grade A	9 points
Grade B	8 points
Grade C	7 points
Grade D	6 points
Grade E	5 points
Grade F	0 points

   The program should input the number of subjects, followed by the grade obtained in each subject. The program should calculate the average of the grade points and print it.

8. Write a program that finds the temperature, as an integer, that in the same in both Celsius and Fahrenheit. The formula to convert from Celsius to Fahrenheit is as follows:

$$Fahrenheit = \frac{9}{5}Celsius + 32$$

   Your program should create two integer variables for the temperature in Celsius and Fahrenheit. Initialize the temperature to 100 degrees Celsius. In a loop, decrement the Celsius value and compute the corresponding temperature in Fahrenheit until the two values are the same.