**INSTRUCTIONS**:  After writing and running the code,cut/copy/paste the code from each program into one word document and upload the document only.

1. Planting Grapevines

A vineyard owner is planting several new rows of grapevines, and needs to know how many grapevines to plant in each row. She has determined that after measuring the length of a future row, she can use the following formula to calculate the number of vines that will fit in the row, along with the trellis end-post assemblies that will need to be constructed at each end of the row:

V = (R - 2E) / S

The terms in the formula are:

* V is the number of grapevines that will fit in the row.
* R is the length of the row, in feet.
* E is the amount of space, in feet, used by an end-post assembly.
* S is the space between vines, in feet.

Write a program that makes the calculation for the vineyard owner. The program should ask the user to input the following:

* The length of the row, in feet
* The amount of space used by an end-post assembly, in feet
* The amount of space between the vines, in feet

Once the input data has been entered, the program should calculate and display the number of grapevines that will fit in the row.

2. Age Classifier

Write a program that asks the user to enter a person’s age. The program should display a message indicating whether the person is an infant, a child, a teenager, or an adult. Following are the guidelines:

* If the person is 1 year old or less, he or she is an infant.
* If the person is older than 1 year, but younger than 13 years, he or she is a child.
* If the person is at least 13 years old, but less than 20 years old, he or she is a teenager.
* If the person is at least 20 years old, he or she is an adult.

3. Write a program with a loop that asks the user to enter a series of positive numbers. The user should enter a negative number to signal the end of the series. After all the positive numbers have been entered, the program should display their sum

4. Write a program that calculates the amount of money a person would earn over a period of time if his or her salary is one penny the first day, two pennies the second day, and continues to double each day. The program should ask the user for the number of days. Display a table showing what the salary was for each day, then show the total pay at the end of the period. The output should be displayed in a dollar amount, not the number of pennies.

5. Write a program that uses nested loops to collect data and calculate the average rainfall over a period of years. The program should first ask for the number of years. The outer loop will iterate once for each year. The inner loop will iterate twelve times, once for each month. Each iteration of the inner loop will ask the user for the inches of rainfall for that month. After all iterations, the program should display the number of months, the total inches of rainfall, and the average rainfall per month for the entire period.