**Project 1 pseudocode**

1. Initialize all variables to 0. (PROCESS)
2. Print Welcome to Space XYZ Calculator (I/O)
3. Print Please choose Operation

1-addition

2-subtraction

3-multiplication

4-division

5-factorial

6-SAS Triangle Area

7- Exit Program

Take user input (I/O)

1. Is operation < 5 (DECISION)
   1. If YES go to step 5
   2. Else go to step 13
2. Print Please choose data type
3. Integer
4. Double

Take user input (I/O)

1. Is data type = 1 (DECISION)
   1. If yes go to Step 7
   2. Else go to Step 10
2. Enter 2 integers (I/O)
3. Perform selected integer operation (PROCESS)
4. Display results (I/O)
   1. Go to step 3
5. Is data type = 2 (DECISION)
   1. If yes go to step 11
   2. Else go to step 3
6. Enter two doubles (I/O)
7. Perform selected double operation (PROCESS)
   1. Go to step 9
8. Is operation = 5 (DECISION)
   1. If yes go to step 14
   2. Else go to step 17
9. Enter integer for factorial calculation (I/O)
10. Perform Fractal calculation (PROCESS)
11. Display results (I/O)
    1. Go to step 3
12. Is operation = 6 (DECISION)
    1. If yes go to step 18
    2. Else go to step 21
13. Enter doubles for side A, side B, and angle value. (I/O)
14. Perform SAS area calculation (PROCESS)
15. Go to step 16
16. Is operation = 7 (DECISION)
    1. If yes EXIT PROGRAM
    2. Else go to step 3