For this project, you will write a MIPS assembly language program to calculate the function

$$y = \frac{(a + 1)x^5 + 2x}{7}$$

Your program should prompt the user to enter values for a and x, compute the result and display the result on the screen. Your program does not need to loop through the process; the example below shows two executions of the program.

Your program should include appropriate comments indicating what the code should be doing and what registers are being used for. After displaying the results, your program should exit cleanly. Your programs should be turned in through HuskyCT before class starts on the due date. You should test your programs using the SPIM simulator to ensure their functionality before submitting them.

Example output:

```
Enter a value for a:   17
Enter a value for x:   6
y=19997 R1.

Enter a value for a:   6
Enter a value for x:   17
y=1419861 R6.
```

Objectives:

1. To introduce the SPIM simulator for the MIPS assembly language.
2. To introduce and practice writing MIPS assembly language programs.

Point Values:

Total.   30 pts