|  |  |
| --- | --- |
| Full Name | Harry Li |
| Student ID | 00193059 |

Initial Design

Algorithm:

1) Output 'Welcome to My Adventure of School'.

2) Prompt user to input their name and store it in a varible named user\_name.

1. If letters in name is equal or below 4  
   A. output 'Wow that is a short name'.
2. if letters in the name is above 4 and below or equal to 7   
   A. output 'That's a cool name'.
3. If letters in name is above 7

A. output 'It must be a struggle writing your name everytime.

3) Output 'Hello' user\_name ', your task is to survive throughout the school with a passing grade. You will get 100 points to start the day, and based on your decisions it would determine your final grade.'

4) Prompt user to input 'test a' or 'test b' and set the input to lower case.

1. If user input 'test a'   
   A.Prompt user to input what is the decimal version of 16/32.  
   B.if user inputs '0.5'  
    a. Output 'Great job, you are one smart cookie!'  
   C.Otherwise  
    a. Output 'Oh no, you got it wrong! That is going to be a 25 point deduction on your final grade! Try harder next time.'  
    b. Set final\_grade value to 75.
2. if user input 'test b'  
   A. Prompt user to input what is the decimal version of 15/12  
   B. If user inputs '1.25'  
    a. Output 'Your answer is correct! Congratulations!'  
   C. Otherwise   
    a. Output 'That's the wrong answer! Your grade has dropped by 25 points! Please study harder!'  
    b. Set final\_grade value to 75.
3. Otherwise output user\_name ' has failed to take the test ' final\_grade ' -50 points'.

B. Set final\_grade value to 50.

5) Prompt user to input their final quiz option 'quiz 1', 'quiz 2' or 'quiz 3' and set the input to lower case.

1. If user input is equal to 'quiz 1'  
   A)Prompt user to input the answer to '6(7-5)^3'  
   B)If user input equals '48'  
    a. Output 'Your Correct!'  
    b. If final\_grade is less than 100   
    I. add 20 to the value final\_grade   
   C)Otherwise  
    a. Output 'That answer is WRONG!'  
    b. Subtract 20 from the value final grade
2. If user input is equal to 'quiz 1'  
   A)Prompt user to input the answer to '0(9+10)^5'  
   B)If user input equals '0'  
    a. Output 'Wow, you got that right!'  
    b. If final\_grade is less than 100   
    I. Add 30 to the value final\_grade   
     
   C)Otherwise  
    a.Output 'That is INCORRECT!'  
    b. Subtract 40 from the value final grade
3. If user input is equal to 'quiz 1'

A) Prompt user to input the answer to '11(2+1)^2'

B) If user input equals '99'

a. Output 'Your gotten the correct answer!'

b. If final\_grade is less than 100

I. Add 15 to the value final\_grade

C) Otherwise

a. Output 'WRONG ANSWER!'

b. Subtract 10 from the value final grade

6) If grade is less than 60

1. Output 'your final grade is: ' ,final grade, ' you have failed to pass the school day! >:('

7) Otherwise if is greater than or equal to 60 and below 70

1. Output 'your final grade is: ' ,final grade, ' you barely pass the school day! :('

8) Otherwise if is greater than or equal to 70 and below 80

1. Output 'your final grade is: ' ,final grade, ' you have gotten an average grade for the school day! :|'

8) Otherwise if is greater than or equal to 80 and below 90

1. Output 'your final grade is: ' ,final grade, ' your grade is almost an A! keep up the good work! :)'

9) Otherwise if is greater than or equal to 90 and below 100

1. Output 'your final grade is: ' ,final grade, ' your grade is an A! Great performance! : )'

9) Otherwise

1. Output 'your final grade is: ' ,final grade, ' your grade is 100%! Outstanding performance! : )'