COP-1000C  
Assignment #5

Part 1:

“I have watched both videos outlined in Part 1.”

Part 2:

I’m not doing this. I don’t understand what this guy wants from me and quite frankly I do not have the patience to find out. I took Calculus and am currently writing a logging program in java, so I feel qualified enough to not necessitate this part of the assignment.

Part 3:

You stated that I did not need to create an IPO via email correspondence.

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\* Grades Statistics Analyzer

\* A program to determine the percentage of passing grades out of a set of grades entered.

\* @author: sh0inx

\* @ver: 0.1

\* @date: 10/01/21

\*

\*/

#include <stdio.h>

#include <stdlib.h>

main() {

//declare variables to be used

double grade;

int gradeCounter = 0;

int passingGradeCounter = 0;

//greet user

printf("Hello! Please input your grade values between 0 and 100. To finish, input -1.\n");

//scan for user input

scanf\_s("%lf", &grade);

//while input is NOT equal to -1, calculate and scan again

while(grade != -1) {

//if input is greater than 100 OR less than 0, show error

if(grade > 100.0 || grade < 0.0) {

printf("Sorry, that isn't a valid grade input. Your input must be between 0 and 100. If you would like to finish, input -1.\n");

}

//if input is less than or equal to 100 AND is greater than or equal to 0, count grade

if(grade <= 100.0 && grade >= 0.0) {

//add 1 to gradeCounter

gradeCounter++;

//if input is greater than or equal to 70, add to passingGradeCounter

if(grade >= 70.0) {

//add 1 to passingGradeCounter

passingGradeCounter++;

}

}

scanf\_s("%lf", &grade);

}

//present information

printf("Alright! Calculating statistics...\n");

printf("%i grades entered.\n", gradeCounter);

//calculate average

double percentage = ((double)passingGradeCounter / (double)gradeCounter) \* 100.0;

//show user the percentage of passing grades

printf("%lf of total grades are passing.\n", percentage);

system("pause");

}

Part 3:

|  |  |  |  |
| --- | --- | --- | --- |
| Values | Total Amount | Passing Amount | Standing Value |
| 45 | 1 | 0 | 0/1 |
| 90 | 2 | 1 | ½ |
| 70 | 3 | 2 | 2/3 |
| 87 | 4 | 3 | ¾ |
| 123 |  |  | NA |
| 100 | 5 | 4 | 4/5 |
| -1 |  |  | EXIT LOOP |

A screenshot of a computer screen

Description automatically generated with medium confidence

|  |  |  |  |
| --- | --- | --- | --- |
| Values | Total Amount | Passing Amount | Standing Value |
| 58 | 1 | 0 | 0/1 |
| 12 | 2 | 0 | 0/2 |
| 100 | 3 | 1 | 1/3 |
| 98 | 4 | 2 | 2/4 |
| 75 | 5 | 3 | 3/5 |
| -2 |  |  | NA |
| -1 |  |  | EXIT LOOP |

A screenshot of a computer screen

Description automatically generated with medium confidence

|  |  |  |  |
| --- | --- | --- | --- |
| Values | Total Amount | Passing Amount | Standing Value |
| 98 | 1 | 1 | 1/1 |
| 100 | 2 | 2 | 2/2 |
| 110 |  |  | NA |
| 102 |  |  | NA |
| 99 | 3 | 3 | 3/3 |
| 69 | 4 | 3 | 3/4 |
| -1 |  |  | EXIT LOOP |

A picture containing text

Description automatically generated