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ECE 1320.04

Midterm

/\* Name: Kelly Williams

\* Date: 10/19/2023

\* Description: midterm

\* Class Section: ECE 1310.04

\*/

/\* Pseudocode

\* ====================================

\* declare variables

\* double copies, per=0.06, cost=0;

\*

\* prompt user input

\* number of copies:

\* >> copies

\*

\* while loop for input validation

\* while copies <= 0

\* invalid input try again

\* >> copies

\*

\* 6 cents per for first 50 copies

\* 50 - copies is positive or zero is there is less than or equal to 50 copies

\* and negative when there are more than 50 copies

\* if 50-copies >= 0 if positive or zero

\* cost = copies\*per

\*

\* now for if there are more than 50 copies

\* if 50-copies < 0 if negative

\* cost = 50\*per per is still 6 here

\* copies = copies-50 this gives us the surplus copies

\* per=0.04 new cost per copy

\* cost = cost + (copies\*per)

\*

\* now for if the minimum cost of copies is less than the min required cost

\* if cost < 1.25

\* cost = 1.25

\*

\* output total cost to user

\* << cost: $ << cost

\*/

//System Libraries

#include <iostream>

//Function Prototypes

//Global Constants

//Main Function

using namespace std;

int main(int argc, char\*\* argv)

{

//declare variables

double copies, per = 0.06, cost = 0;

//prompt user input

cout << "Number of copies: ";

cin >> copies;

//input validation

while (copies <= 0)

{

cout << "Invalid number of copies! It cannot be a negative number! Please re-enter." << endl

<< "Number of copies: ";

cin >> copies;

}

//within 50 copies

if ((50 - copies) >= 0)

{

cost = copies \* per;

}

//greater than 50 copies

if ((50 - copies) < 0)

{

cost = 50 \* per;

copies = copies - 50;

per = 0.04;

cost = cost + (copies \* per);

}

//minimum cost not reached

if (cost < 1.25)

{

cost = 1.25;

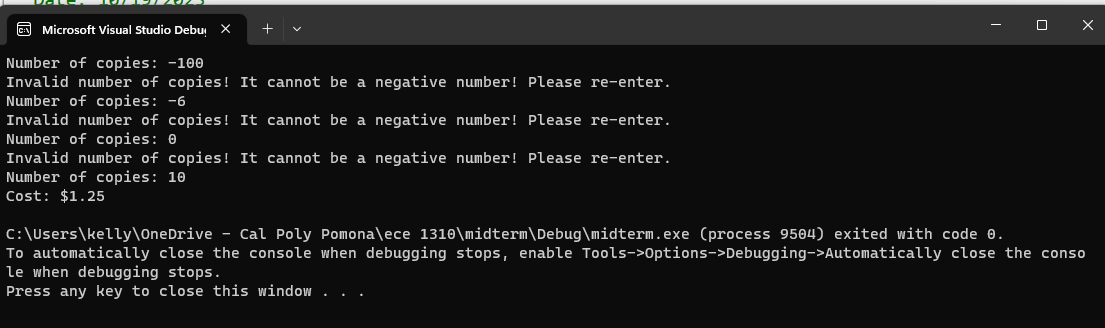
}

//output cost to user

cout << "Cost: $" << cost << endl;

return 0;

}



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