$\begin{array}{c} \textbf{Project 1-Enhancing an existing C} \\ \textbf{Program} \end{array}$

by

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ICS 265 : C Programming Sam Espana, CF

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Introduction

The first project is about using an existing C program to enhance it with additional features. The current program terminates after input = -1 but users will be allowed to input any negative integer value in the future. In addition, input will only allow values between 0 and 100.

-Also we need to create binaries for arm and amd

Screenshots

```
> tcc -run proyect1.c

Programmer: Havi Arji
Date: 19/09/2025

Enter grade, negative to end: 66
Enter a netative number to end: 77
Enter a netative number to end: 88
Enter a netative number to end: 99
Enter a netative number to end: 100
Enter a netative number to end: 1000
Invalid. Enter a value 0 to 100: Enter a netative number to end: -4
Class average is 86.00
```

Figure 1: Here the code in execution

```
> ./proyect1

Programmer: Havi Arji
Date: 19/09/2025

Enter grade, negative to end: 66
Enter a netative number to end: 77
Enter a netative number to end: 88
Enter a netative number to end: 99
Enter a netative number to end: 100
Enter a netative number to end: 1000
Invalid. Enter a value 0 to 100: Enter a netative number to end: -3
Class average is 86.00
```

Figure 2: Here the code compiled in binary

General Comments

```
while (grade >= 0) {
   if (grade <= 100) {
      total = total + grade; // add grade to total
      counter = counter + 1; // increment counter
   } else {
      printf("Invalid. Enter a value 0 to 100: ");
      scanf("%d", &grade);
   }
}</pre>
```

1: Enhanced C code with input validation

The code, binaries and documentation can be found on: https://github.com/4rji/C-Programming/tree/main/proyect1