System Programming Project #2

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# Problem Statement

**Project #2**

Write a program to calculate the target address (in hexadecimal) of an SIC/XE object command. The program should prompt the user to enter the values of the program counter, base register, and index register (in hexadecimal) whenever they are needed. Example, for the following input

17202D

The program should prompt the user to enter the program counter value, if 3 is entered, the program should display

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To accomplish this project, you should extract both displacement and bit flags then handle the impact of these bit flags on calculating the target address.

# Solution

* We used a function called “add” which concatenate the address and the relative which are entered by the user
* The user enters an instruction
* We use Switch Statement for the 3 elements in the array to decide which addressing mode is used
* Then we print the Target address

# Code

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