

## 2. Write a prefix stack and show how it works (in main).

First, I made Boolean function that checks the character passed in is number or operand . It returns isdigit of the character passed in, isdigit checks if the character passed in is number through 0 to 9. In main function I declared a string named equation and takes prefix equation by the user. myStack to push and pop the equation. Op1, and op2 is temporary integer type of value can be stored and push the result to the stack. I used for loop that size of equation string size-1, and decreases in size, because for the prefix expressions, we have to check the right side of the equation. When the string is read through the for loop, we have to check the string size and check what is there. By If statement, check the character at the end of the string is number or operator by isOpr Boolean function. If is number character, push the number to the stack. Since the number is in character, by subtracting `-'0'` makes the char to number by changing ascii code. If the character is not a number character, using switch statement we check if it is addition, subtraction, multiplication, or division. The default case would end the program if character is something else.

```
write a equation of prefix
+++4152
12
C:\Users\23709967\source\repos\HWQ2\Debug\HWQ2.exe (process 13612) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

Microsoft Visual Studio Debug Console

write a equation of prefix

++59\*42

53

C:\Users\23709967\source\repos\HW02\Debug\HW02.exe (process 25140) exited with code 0.

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