C - AVERAGE - PART005

Solved Challenges **0/10**

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Robot co-ordinates

ID:6 **Solved By 3039 Users**

The initial x and y co-ordinate values of a Robot are passed as the input.
The rest of the input values are the directions in which the Robot moves along with the distance in that direction.
The directions are denoted by N, E, S, W for North, East, South and West.
The program should print the final x and y co-ordinates of the Robot.

The input will be a single string value with the above details separated by one or more spaces.

Boundary Conditions:
The length of the input string will be less than 100.

Example Input/Output:
If the input string is **x2 y1 N3 E2 S1** the output must be **x4 y3**
If the input string is **x-2 y3 N1 W3** the output must be **x-5 y4**

Max Execution Time Limit: 5000 millisecs

Ambiance

C (gcc 8.x)

Reset

```c
#include<stdio.h>
#include<stdlib.h>

int main()
{
    char str[101];
    scanf("%[^/n]s",str);
    int index=0;
    char x = str[index + 1];
    int X,Y;
    X = x-'0';
    if(x=='-')
    {
        X = -(str[index+2]-'0');
        index++;
    }
    char y = str[index+4];
    Y = y - '0';
    if(y=='-')
    {
        Y = -(str[index+5]-'0');
        index++;
    }

    for(int i=index+6;i<strlen(str);i=i+3)
    {
        char ch = str[i];
        int num = str[i+1] - '0';
        if(ch == 'N')
            Y = Y+num;
        else if(ch == 'S')
            Y = Y-num;
        else if(ch == 'E')
            X = X+num;
        else if(ch == 'W')
            X = X-num;
    }

    printf("x%d y%d", X,Y);


}
```

Code did not pass the execution

TestCase ID: 12

Input:

```
x0 y-4 N2 E5 S7
```

Expected Output:

```
x5 y-9
```

Your Program Output:

```
x0 y-4 N2 E5 S7
x5 y-9
```

Save Run

Run with a custom test case (Input/Output)