

Count the number of distinct modulo 5 among the elements of an array

Example:

<i>array</i>	<i>90</i>	<i>73</i>	<i>11</i>	<i>-4</i>	<i>7</i>	<i>1</i>	<i>0</i>	<i>2</i>
<i>remainders from division by 5</i>	<i>0</i>	<i>3</i>	<i>1</i>	<i>-4</i>	<i>2</i>	<i>1</i>	<i>0</i>	<i>2</i>

various remainders 0;3;1;-4;2

answer 5

```
void checkArray(int arr[], int length) {
    int addArray[length];
    int flag;
    int var = 0;
    for (int i = 0; i < length; i++) {
        flag = 0;
        for (int j = 0; j < var; j++) {
            if (addArray[j] == arr[i] % 5) { // encountered a repeated number
                flag = 1;
                break;
            }
        }
        if (flag == 0) { // checking if encountered a new number, flag = 0 means yes
            addArray[var] = arr[i] % 5; // adding new number to array (the remainder of arr[i])
            var++; // acts as a counter and index of new array #
        }
    }
    std::cout << " number of remainders: " << var << std::endl;
}
```