Change the elements of the SWITCH array:
divisible by 4 divided by 2,
divisible by 4 with a remainder of 1 → zero,
divisible by 4 with a remainder of 2 change sign,
divisible by 4 with a remainder of 3, increase by 7.

```
void sumArray(int arr[], int length) {
  int stopFlag;
  for (int i = 0; i < length; i++) {
     stopFlag = 0;
     if (stopFlag == 0 && arr[i] % 4 == 0) {
        arr[i] = arr[i] / 2;
        stopFlag = 1;
     }
     if (stopFlag == 0 && arr[i] % 4 == 1) {
        arr[i] = 0;
        stopFlag = 1;
     }
     if (stopFlag == 0 && arr[i] % 4 == 2) {
        arr[i] = arr[i] * (-1);
        stopFlag = 1;
     }
     if (stopFlag == 0 && arr[i] % 4 == 3) {
        arr[i] = arr[i] + 7;
        stopFlag = 1;
     }
  }
}
```

```
void sumArray(int arr[], int length) {
  int stopFlag;
  for (int i = 0; i < length; i++) {
     switch(arr[i] % 4)
     {
          case 0:
              arr[i] = arr[i] / 2;
          break;
          case 1:
              arr[i] = 0;
          break;
          case 2:
              arr[i] = arr[i] * (-1);
          break;
          case 3:
              arr[i] = arr[i] + 7;
          break;
          default:
              arr[i] =arr[i]*arr[i];
          break;
     }
  }
}
```

homework

2 ways
1)if - else if
2)continue

```
void sumArray(int arr[], int length)
{
 for (int i = 0; i < length; i++) {
    if (arr[i] % 4 == 0) {
       arr[i] = arr[i] / 2;
    }
    else if (arr[i] % 4 == 1) {
       arr[i] = 0;
    }
    else if (arr[i] % 4 == 2) {
       arr[i] = arr[i] * (-1);
    }
    else if (arr[i] % 4 == 3) {
       arr[i] = arr[i] + 7;
    }
  }
}
```

```
void sumArray(int arr[], int length) {
 for (int i = 0; i < length; i++) {
    if (arr[i] % 4 == 0) {
       arr[i] = arr[i] / 2;
       continue;
    }
    if (arr[i] % 4 == 1) {
       arr[i] = 0;
       continue;
    }
    if (arr[i] % 4 == 2) {
       arr[i] = arr[i] * (-1);
       continue;
    }
    if (arr[i] % 4 == 3) {
       arr[i] = arr[i] + 7;
       continue;
    }
  }
}
```

good

```
if(stopFlag == 0 && count_1001_digit_of_number_e())
{

}
```

bad

```
if(count_1001_digit_of_number_e() && stopFlag == 0)
{

}
```