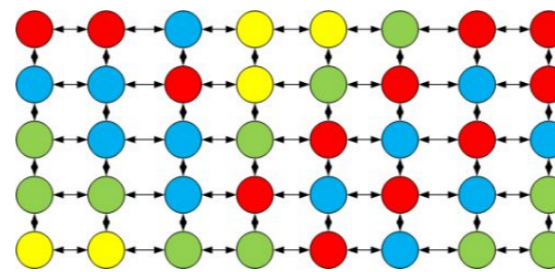


## 1) change the elements of array using SWITCH:

divisible by 7 → double by 2,  
 divisible by 7 with a remainder of 1 → change sign,  
 divisible by 7 with a remainder of 2 → replace with a modulus,  
 divisible by 7 with a remainder of 3 --> zero

2) change the elements of the array in 3 ways (**else if**; **continue**; **flag**):  
 divisible by 7 positive → double,  
 divisible by 7 with a remainder of 1 → change sign,  
 divisible by 7 with a remainder of -2, → replace with zero  
 the rest -> +2

// cannot be done with a switch statement because it has more than 1 condition  
 “divisible by 7” && “positive”



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

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

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

```
void sumArray(int arr[], int length) {
  for (int i = 0; i < length; i++) {
    switch(arr[i] % 7) {
      case 0:
        arr[i] = arr[i] * 2;
        break;
      case 1:
        arr[i] = arr[i] * (-1);
        break;
      case -2:
        arr[i] = myAbs(arr[i]);
        // calls myAbs function as long as it is above, not
below
        break;
      case 3:
        arr[i] = 0;
        break;
      default:
        arr[i] = arr[i];
        break;
    }
  }
}
```