

Trace the following code segments by hand. In the provided area, write the display exactly as it will appear.

1. What is the output?

```
int a[5] = {};  
  
for (int i = 0; i < 5; i++) {  
    if (i % 3 == 0)  
        a[i]++;  
    else if (i % 3 == 1)  
        a[i] += 5;  
    else  
        a[i]--;  
}  
displayArray(a, 5);
```

Output:

```
void displayArray(int b[], int size) {  
    for(int i=0; i<size; i++)  
        cout << "Element " << i << " = " << b[i] << endl;  
}
```

2. What is the output?

```
int b[2][3] = { {3,4,5},{6,7,8} };  
  
for (int i = 0; i < 2; i++) {  
    for (int j = 0; j < 3; j++) {  
        if(i==0 || j%2==0)  
            b[i][j] *= 2;  
        else  
            b[i][j] *= 100;  
    }  
}  
displayMultiArray(b, 2, 3);
```

Output:

```
void displayMultiArray(int b[][3], int rowSize, int colSize) {  
    for (int i = 0; i < rowSize; i++) {  
        for (int j = 0; j < colSize; j++)  
            cout << "Element[" << i << "][" << j << " ] = " << b[i][j] << "\t";  
        cout << endl;  
    }  
}
```