

## Exercise 2

For each of the following code segments, use OpenMP pragmas to make the loop parallel, or explain why the code segment is not suitable for parallel execution.

- a. 

```
for (i = 0; i < sqrt(x); i++)
    a[i] = 2.3 * i;
    if (i < 10)
        b[i] = a[i];
}
```
- b. 

```
flag = 0;
for (i = 0; i < n && !flag; i++)
    a[i] = 2.3 * i;
    if (a[i] < b[i])
        flag = 1;
}
```
- c. 

```
for (i = 0; i < n && !flag; i++)
    a[i] = foo(i);
```
- d. 

```
for (i = 0; i < n && !flag; i++) {
    a[i] = foo(i);
    if (a[i] < b[i])
        a[i] = b[i];
}
```
- e. 

```
for (i = 0; i < n && !flag; i++) {
    a[i] = foo(i);
    if (a[i] < b[i])
        break;
}
```
- f. 

```
dotp = 0;
for (i = 0; i < n; i++)
    dotp += a[i] * b[i];
```
- g. 

```
for (i = k; i < 2 * k; i++)
    a[i] = a[i] + a[i - k];
```
- h. 

```
for (i = k; i < n; i++) {
    a[i] = c * a[i - k];
```