Data Races Exercises

Data Races 1

- In the following code sample, func1 and func2 are run as concurrent threads

```
const int x{5};

int func1() {
    return 2*x;
}

int func2() {
    return 3*x;
}
```

- Can a data race occur? Explain your answer

Data Races 2

- In the following code sample, func1 and func2 are run as concurrent threads

```
int x{0}, y{0};

void func1() {
    if (x)
        y = 1;
}

void func2() {
    if (y)
        x = 1;
}
```

- Can a data race occur? Explain your answer

Data Races 3

- In the following code sample, func1 and func2 are run as concurrent threads

```
int x{0}, y{0};

void func1() {
    x = 1;
    int r1 = y;
}

void func2() {
    y = 1;
    int r2 = x;
}
```

- Can a data race occur? Explain your answer