Assignment\_1.1

1.a) False

b) False

2. **Recycling** occurs when **vector** arithmetic is performed on multiple **vectors** of different sizes. **R** takes the shorter **vector** and repeats them until it becomes long enough to match the longer one.

3. Example of Recycling:

*Recycling* occurs when vector arithmetic is performed on multiple vectors of different sizes. R takes the shorter vector and repeats them until it becomes long enough to match the longer one.

c(1,2,3,4,5,6) + c(1,3)

Output: 2 4 3 7 6 9

Here, the c(1,3) vector repeated itself to form c(1,3,1,3,1,3) so that it could successfully match the previous term.

If the shorter vector is not a vector of the longer one, then a warning message appears, but the operation still takes place.

c(1,2,3,4,5) + c(1,3)

2 5 4 7 6

Warning message:

In c(1, 2, 3, 4, 5) + c(1, 3) :

longer object length is not a multiple of shorter object length.