Problem 1

1. Say True or False for the below statements:

• Prescriptive Analytics used to predict the future outcomes?

• Base R packages installed automatically?

**Answer 1**:

1.1: First we talk about the Prescriptive Analytics which use optimization and simulation algorithms to advice on possible outcomes and answer: “What should we do?

So the answer is FALSE

1.2: R Base package basically provides input/output functionality and arithmetic calculation functionality Base package is automatically installed at the time of R Programming Environment setup.

So the answer is TRUE

Problem 2

2. What is Recycling of elements in a vector?

**Answer 2**: In R Programming language, recycling of elements is when we perform operations on two different vectors having different lengths. In it, the elements of the shorter length vector are used to complete the operation or we can say If we apply arithmetic operations to two vectors of unequal length, then the elements of the shorter vector are recycled to complete the operations this also known as vector element recycling.

Problem 3

3. Give an example of recycling of elements.

**Answer 3**: Please see the script file that I have attached for the example