7.3

Step 1:

First get 20 dice rolls into an int array, should all be between 1-6.

Then read over to see the longest length of numbers.

Last output the data set with the longest length marked

Step 2:

The 20 Dice rolls will be given with the Random method nextInt(6) + 1.

We keep track with an int, we replace that int with the largest length read from the array.

Prints the array while going through the array. This is paired with a check in which it detects the position before the longest length and puts a marker “(“ and “)” before and after.

7.10

Step 1:

First we make a deck and deal 5 cards, we replace whatever cards we want and get it scored

Step 2:

First we make a Card class to keep track of the Rank and Suit of a card.

Then we make a Deck and Hand Class based off of the Card Class.

The deck class only makes a full deck and deals cards.

The Hand Class obtains 5 Cards and calculates the name and score of the hand after using a sorting algorithm.

7.12

Step 1:

We obtain user input in which is placed into an Invoice, when we are done we return a discounted price based on what we bought

Step 2:

First we make an Item object to keep track of if it is a pet, the quantity of that item and the price.

Then we make an Invoice object to keep track of the Items taken from User Input.

After we make a Discount method In which detects a non-pet item and discounts it.

Lastly, we return the discounted grand total to the system.