Class 4, Homework Assignment

Question 1 (2 points). Create a vector with intergers from 1 to 10 can call it 'a'. Use operators to create indices for values that satisfy each one of the following conditions: (1) less than 3, (2) equal to 5, (3) not equal to 7, and (4) are odd numbers.

Question 2 (2 points). Create a vector with these values: 1.1, -2.2, 3.3, -4.4, 5.5 and call it 'b'. Calculate the square, square root, logarithm, and exponential of the absolute of these values.

Question 3 (2 points). Generate a vector with 10 random numbers and call it 'v' using the code provided below. Then Calculate the mean, variance, standard deviation, and range of 'v'.

```
v <- rnorm(n=10, mean=0, sd=1)
```

Question 4 (2 points). Create a vector with a sequence of intergers from 1 to 10 and call it 'v1'. Create another vector with a sequence of values from -4 to 6 with an interval of 0.5 and call it 'v2'. Create another vector with a sequence of 9 values from 4 to 8 and call it 'v3'. What values in 'v3' are also in 'v1' and 'v2'?

Question 5 (2 points). Create a vector with six consecutive 2 and six consecutive 3 and call it 'r1', Create another vector with a sequence of integers from 1 to 3 call it 'r2'. Add these two vectors and call it 'r3'. What is the largest even numbers in 'r3'?