Q.1

You can read characters from a string with the `charAt` method. For the first character, pass a position of 0 to `charAt`. For the last character pass the position that is equal to the length of the string -1 to `charAt`.

Strings in Java are immutable, so they cannot be directly changed. Thus, to “remove” the first character from a string, we can take a substring of the original string that contains the entire thing minus the first character. If our string is called `s`, then this works: `s.substring(1, s.length())`. The last character can be obtained by extracting the substring that contains the entire string minus the last character, like this: `s.substring(0, s.length()-1);`.

Q.2

```java
import java.util.Scanner;

public class MileageStats
{
    public static void main(String[] args)
    {
        Scanner in = new Scanner(System.in);

        System.out.print("Please enter the number of gallons of gas in the tank: ");
        double gallonsOfGas = in.nextDouble();

        System.out.print("Please enter the fuel efficiency (miles per gallon): ");
        double milesPerGallon = in.nextDouble();

        System.out.print("Please enter the price of gas per gallon: ");
        double pricePerGallon = in.nextDouble();

        double costPer100Miles = 100 / milesPerGallon * pricePerGallon;
        double maximumDistance = milesPerGallon * gallonsOfGas;

        System.out.printf("To drive 100 miles, it will cost $%.2f.\n", costPer100Miles);
        System.out.printf("The car can currently drive a maximum of %f miles.\n", maximumDistance);
    }
}
```

Q.3

```java
import java.util.Scanner;

public class MilitaryTime
{
    public static void main(String[] args)
    {
        final int MINUTES_IN_HOUR = 60;
```
Scanner in = new Scanner(System.in);
System.out.print("Please enter the first time: ");
int firstTime = in.nextInt();
int firstTimeInMinutes = firstTime / 100 * MINUTES_IN_HOUR +
firstTime % 100;

System.out.print("Please enter the second time: ");
int secondTime = in.nextInt();
int secondTimeInMinutes = secondTime / 100 * MINUTES_IN_HOUR +
secondTime % 100;

int minutes = secondTimeInMinutes - firstTimeInMinutes;
int hours = minutes / 60;
minutes = minutes % 60;

System.out.printf("%d hours %d minutes", hours, minutes);