src\Problem1.java

```java
/*
Name: Hunter Poole
Date: 2/24/25
HW #: 5
Problem #: 1
Source Code: Problem1.java
Action: Takes a single char, returns char, ASCII value,
        and next two characters. Runs in a loop.
        Counts # of uppercase, lowercase, digits, and
        other characters entered. '#' to exit.
        Displays a table for counts of char types at exit.
 */

import java.util.Scanner;

public class Problem1
{
    public static void main(String[] args)
    {
        char Ch, NextCh, NextCh2;
        int Ch_Value, Uppercase = 0, Lowercase = 0, Digit = 0, Other = 0;

        Scanner Input = new Scanner(System.in);

        do
        {
            System.out.print("Please enter your character ---> ");
            Ch = Input.next().charAt(0);
            Ch_Value = Ch;

            if (Ch != '#')
            {
            System.out.printf("%n%s %c %n%s %c %s %d %n","You entered", Ch, "The ASCII value
of",
            Ch, "is", Ch_Value);

            NextCh = Ch;
            NextCh2 = ++NextCh;

            System.out.printf("%s %c %s %c %n%n", "The next two characters are:", NextCh++,
                        "and", ++NextCh2);
            }

            if (Character.isUpperCase(Ch))
            {
                Uppercase++;
            }
```

```java
47                else if (Character.isLowerCase(Ch))
48                {
49                    Lowercase++;
50                }
51                else if (Character.isDigit(Ch))
52                {
53                    Digit++;
54                }
55                else if (Ch != '#')
56                {
57                    Other++;
58                }
59
60            }while (Ch != '#');
61
62            System.out.printf("%n%s %d %n%s %d %n%s %d %n%s %d", "Number of uppercase--------->",
    Uppercase,
63                                "Number of lowercase--------->", Lowercase, "Number of
    numbers----------->", Digit,
64                                "Number of other characters-->", Other);
65        }
66 }
67
68 /*
69 Please enter your character ---> A
70
71 You entered A
72 The ASCII value of A is 65
73 The next two characters are: B and C
74
75 Please enter your character ---> v
76
77 You entered v
78 The ASCII value of v is 118
79 The next two characters are: w and x
80
81 Please enter your character ---> 5
82
83 You entered 5
84 The ASCII value of 5 is 53
85 The next two characters are: 6 and 7
86
87 Please enter your character ---> @
88
89 You entered @
90 The ASCII value of @ is 64
91 The next two characters are: A and B
92
93 Please enter your character ---> (
```

```
 94
 95  You entered (
 96  The ASCII value of ( is 40
 97  The next two characters are: ) and *
 98
 99  Please enter your character ---> #
100
101  Number of uppercase---------> 1
102  Number of lowercase---------> 1
103  Number of numbers-----------> 1
104  Number of other characters--> 2
105
106      ////// Extremes \\\\\\
107
108  Please enter your character ---> !
109
110  You entered !
111  The ASCII value of ! is 33
112  The next two characters are: " and #
113
114  Please enter your character ---> ~
115
116  You entered ~
117  The ASCII value of ~ is 126
118  The next two characters are:   and ?
119
120  Please enter your character ---> #
121
122  Number of uppercase---------> 0
123  Number of lowercase---------> 0
124  Number of numbers-----------> 0
125  Number of other characters--> 2
126   */
```