Question 1:

Write a program that asks the user to enter a word. The program will then repeat word for as many times as it has characters:

```
Enter a word:
Hello
Hello
Hello
Hello
Hello
Hello
```

To do this you will need to use the `length()` method that counts the number of characters in a string:
```
String inputString;
int times;

... ...
times = inputString.length()
```

Question 2:

Write a java program that displays the following menu driven:

```
Please Select one of the following
1-Power Program ( x^n )
2-Sum Program ( S = 1+ 2+ 3+ 4+ ... + n )
3-Exit

your choice: 1
Enter an Integer?> 3
Enter the Wanted Power?> 2
3 Power 2 is: 9

Please Select one of the following
1-Power Program ( x^n )
2-Sum Program ( S = 1+ 2+ 3+ 4+ ... + n )
3-Exit

your choice: 3
Bye
```
Question 3:
Write a java program that displays the following pattern. Use for loops to generate the pattern. All asterisks (*) should be printed by a single statement of the form System.out.print("*"). A statement of the form System.out.println() can be used to move to next line. A statement of the form System.out.print(" ") can be used to display a space.

```
**********
*********
********
*******
******
*****
****
***
**
*
```

Question 4:
Write a program for a grocery that reads products data and determine and display the product that has the highest price and the average price. A product has three pieces of data: id (int), name (String) and price (double).
Your program should continue reading new products until user enters -1 as id of a product.

<table>
<thead>
<tr>
<th>Product</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ id: int</td>
<td>Enter product id: 1001</td>
</tr>
<tr>
<td>+ name: String</td>
<td>Enter product name: Pepsi</td>
</tr>
<tr>
<td>+ price: double</td>
<td>Enter product price: 1</td>
</tr>
<tr>
<td></td>
<td>Enter product id: 1021</td>
</tr>
<tr>
<td></td>
<td>Enter product name: Kit Kat</td>
</tr>
<tr>
<td></td>
<td>Enter product price: 2</td>
</tr>
<tr>
<td></td>
<td>Enter product id: 1011</td>
</tr>
<tr>
<td></td>
<td>Enter product name: Chips</td>
</tr>
<tr>
<td></td>
<td>Enter product price: 0.5</td>
</tr>
<tr>
<td></td>
<td>Enter product id: -1</td>
</tr>
<tr>
<td></td>
<td>---------------------------------</td>
</tr>
<tr>
<td></td>
<td>The most expensive product is:</td>
</tr>
<tr>
<td></td>
<td>Id: 1021 Name: Kit Kat Price: 2 S.R.</td>
</tr>
<tr>
<td></td>
<td>Average price = 1.167</td>
</tr>
</tbody>
</table>