1. **Implement the Math.pow, Math,max, Math.min method (25pt.)**

Write three methods that returns power, max and min of two double number.

* 1. Prompt the user to enter 2 double numbers. (These are the sample input numbers)

1. This must follow the print format. (2.5pt)

Text

Description automatically generated with medium confidence

1-2 Find the power of two number. (**Not using Math.pow, make your own method**)

1. Make method that returns power of two number by using the following header: (10pt)

* ***public static double power(double num1, double num2)***
  1. Find the max and min of two number. (**Not using Math.max or Math.min, make your own method**)

1. Make method that returns maximum number of two number by using the following header: (5pt)

* ***public static double max(double num1, double num2)***

1. Make method that returns minimum number of two number by using the following header: (5pt)

* ***public static double min(double num1, double num2)***
  1. Display the output in following format. (These are sample input numbers) (2.5pt)

Text

Description automatically generated

**2. Find the largest and the smallest element (25pt.)**

Write two methods that find the largest element in an array and the smallest element in an array of double values.

2-1. Prompt the user to enter 10 numbers. (These are the sample input numbers.)



1. This must be done in your ***main*** method. (1.5pt)
2. You must follow the print format above. (1pt)

2-2. Find the largest element.

1) Use the following header to find the largest element: (5pt)

* ***public static double max(double[] myArray)***

2) Invoke this method to return the maximum value. (5pt)

2-3. Find the smallest element.

1. Use the following header to find the smallest element: (5pt)

* ***public static double min(double[] myArray)***

1. Invoke this method to return the minimum value. (5pt)

2-4. Display the maximum and the minimum value together. (These are sample input numbers)



1. This must be done in your ***main*** method. (1.5pt)
2. You must follow the print format above. (1pt)

**3. Determine if the word entered is a palindrome. (25pt.)**

Write a function that determines whether a given word is a palindrome. (**ONLY LETTERS**)

3-1. Prompt the user to enter letters like the following sample. (These are the sample input) (2.5pt)



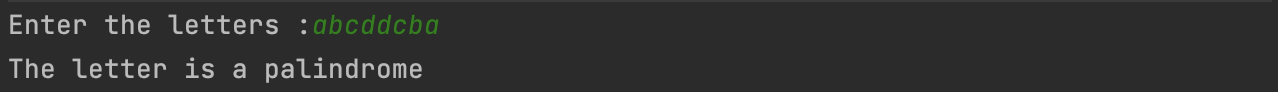
3-2. Implement the method that determines whether a given word is a palindrome. (20pt)

1. Use the following header to validate the palindrome:

* ***public static boolean validate(String word)***

3-3. Display the output in following format. (These are sample input numbers) (2.5pt)

(If the word is a palindrome)



(If the word is not a palindrome)

