Question 3

Suppose I have a random number generator that generates numbers according to a Weibull distribution where \( \eta \) equals 100, \( \beta \) equals 2 and \( \gamma \) equals 10. Classify the following statements as true or false. Use the answer sheet.

**Statement A:** Roughly 60 percent of the generated values will be below 100.

**Statement B:** Compared to a Weibull where \( \gamma \) equals 5, more generated values will be clustered around the mean.

**Statement C:** The generator cannot generate values lower than twenty.

**Statement D:** Compared to an exponential, more generated values will be clustered around the mean.

**Statement E:** There is no theoretical maximum value that can be generated.

**Statement F:** Roughly 40 percent of the generated values will be above 110.

**Statement G:** Compared to a Weibull where \( \beta \) equals .5, more generated values will be clustered around the mean.

**Statement H:** The generator cannot generate values lower than ten.

**Statement I:** Compared to a Weibull where \( \eta \) equals 50, more generated values will be clustered around the mean.

**Statement J:** The generator cannot generate negative values.

**Statement K:** Roughly 40 percent of the generated values will be above 90.

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Question 4

Suppose I have input files where each line contains a person's name (which is just one word) and a value (which is an integer). Here's an example input file:

```
Brian-Westbrook 346
Donovan-McNabb 252
DeSean-Jackson 1040
Jeff-Garcia -49
Kevin-Curtis 252
```

Write a program that prints out names, one per line. The names should be ordered first by their values, low to high, and if there are multiple people with the same value, they should be ordered lexicographically. If there are two lines with the same name and value, print the name twice.

For example, on the above input, the output should be:

```
Jeff-Garcia
Donovan-McNabb
Kevin-Curtis
Brian-Westbrook
DeSean-Jackson
```

Use proper data structures for the task. You may assume that input is in the correct format.