**Requirement Specification for RankPredictor**

The program called **RankPredictor** must read the excel file **Input-Rank-Cutoff-List**

**.xlsx (as attached)** should be executed like the following:

**RankPredictor Rank=<Rank-Number> Category=<Category-Type> Order=<Display-Order>**

[Note: **Rank** is a natural number, **Category** is a string either **General**, **OBC**, **SC** or **ST**] and **Display-Order** is either **Institute-Wise** or **Department-Wise**

If the program is executed like **RankPredictor Rank=<Rank-Number> Category=General Order=Institute-Wise**, the output will be excel file with name

**Prospective-Institutes-Wise-Department-List-for-Rank-<Rank-Number>.xlsx** like the following:

|  |  |  |
| --- | --- | --- |
| **Institute** | **Category** | **Department(s)** |
| Name of the Institute | General | Department names separated by comma |

If the program is executed like **RankPredictor Rank=<Rank-Number> Category=General Order=Department-Wise**, the output will be excel file with name

**Prospective-Department-Wise-Institute-List-for-Rank-<rank-Number>.xlsx** like the following:

|  |  |  |
| --- | --- | --- |
| **Department** | **Category** | **Institute(s)** |
| Name of the Department | General | Institute names separated by comma |

Here are a few examples:

**Example #1**

If we run **RankPredictor Rank=40 Category=General** **Order=Department-Wise** and the output **Prospective-Department-Wise-Institute-List-for-Rank-40.xlsx** will look like the following:

|  |  |
| --- | --- |
| **Department** | **Institute(s)** |
| Computer Engineering | All Institutes |
| Electrical Engineering | All Institutes |
| And so on ... | And so on ... |

**Example #2**

If we run **RankPredictor Rank=6000 Category=General Order=Institute-Wise** and the output **Prospective-Institutes-Wise-Department-List-for-Rank-6000.xlsx** will look like the following:

|  |  |
| --- | --- |
| **Institute** | **Department(s)** |
| IIT Kharagpur | Agriculture & Food, Applied Geology, Chemistry, Exploration Geophysics |
| IIT Kanpur | Chemistry |
| IIT Madras | Biological Sciences |
| IIT Roorkee | Physics |
| IIT Guwahati | Biotechnology |
| IIT Jodhpur | Systems Science, Biologically-inspired |
| IT (BHU) Varanasi | Ceramic Engineering, Mining Engineering, Pharmaceutics, Biochemical Engineering, Bioengineering, Ceramic Engineering, Material Science, Mining Engineering, Industrial Chemistry |
| And so on ... | And so on ... |