**Summary of Career Opportunity for Mathematics Students**

Here we work for the career opportunity of a mathematics student. To find out the opportunity in worldwide and specially in Bangladesh we select 300 higher study subjects with mathematical background. Then organize the data as below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Number*** | ***Subject Title*** | ***Branch*** | ***Focus Area*** | ***Career Relevance*** | ***Successors*** | ***Successors in Bangladesh*** |
| 1 | Abstract Algebra | Pure Mathematics | Structures like groups, rings, and fields | Cryptography, coding | Data scientists, cryptographers | Mathematicians, educators |
| 2 | Real Analysis | Pure Mathematics | Study of real numbers and functions | Financial modeling | Financial analysts | Statisticians, economists |
| 3 | Complex Analysis | Pure Mathematics | Functions of complex variables | Signal processing | Engineers, data analysts | Research scientists |
| 4 | Topology | Pure Mathematics | Properties of space and continuity | Network theory | Network analysts | Academics, researchers |
| 5 | Differential Equations | Applied Mathematics | Equations involving derivatives | Engineering, physics | Engineers, researchers | Engineers, academia |
| 6 | Numerical Analysis | Applied Mathematics | Algorithms for approximating solutions | Data analytics | Data scientists | Analysts, tech professionals |
| 7 | Graph Theory | Pure Mathematics | Study of graphs and networks | Social network analysis | Data analysts | IT professionals |

Taking the all 300 datas like the table in a spreadsheet, we take another sheet to analysis the data with the pivot table. After analysis thedata we get the information as follows:

**1. PivotTable: Grouping Data by Career Relevance**

The analysis of career relevance show a diverse in various of fields which held more successors and the number of students who succeed in these field:

* **Top Fields**:
  + Computer Science: 30
  + Business Strategy: 9
  + Cybersecurity: 8
  + Data Science: 15
  + Education: 11
* **Total Number of Students**: 300

This data indicates a strong inclination towards technology and data-oriented careers, reflecting current industry trends world wide.

**2. PivotTable: Grouping Data by Successor in Bangladesh**

The successor analysis highlights the distribution of various career paths and their relevance in the job market as a successor students in Bangaladesh:

* **Key Categories**:
  + Analysts: 44
  + Researchers: 72
  + Consultants: 10
  + Engineers: 9
  + Educators: 3
* **Total Successors**: 300

This grouping illustrates a significant demand for analysts and researchers, emphasizing their importance in various sectors in Bangladesh.

**3. Comparative Insights**

Both analyses underscore the growing importance of data-driven careers in the Mathematics sector. The highlighted fields like computer science, data science, and analytics in career relevance is succeeded by huge number of analysts and researchers .

The data suggests a potential focus for educational programs and workforce development strategies, aligning with market needs to equip students with skills relevant to these in-demand fields.

AS a Bangladeshi student research, educators and analysist can be a big opportunity for them. So, they have to focus on subject and learn every aspects of that subject to become a researcher or educator or a analysist. By learning that way various path of success will open in front of them.