Sneaky Series

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Yashraj Kakkad  
AU1841036  
[kakkad.m@ahduni.edu.in](mailto:kakkad.m@ahduni.edu.in)  
+91-9898899179

Prayag Savsani  
AU1841035  
[prayag.s@ahduni.edu.in](mailto:prayag.s@ahduni.edu.in)  
+91-7990437837

# Goals:

1. **To crack any series problem of any competitive examination**
2. **To teach students how to crack series with hands-on problem solving**
3. **To learn from the user in case the program cannot crack the series**

# Problems solved:

* Series problems asked in big competitive exams are usually tough and most books covering this are not exhaustive. This project will be a **one stop destination** for anyone willing to master such problems. The “e-learning” section will teach him all the concepts from the basics while involving him.
* The program will be able to solve any **standard** (Arithmetic, Geometric, Prime Numbers, Fibonacci etc.) as well as many **complex series** involving relations with previous terms.
* The user will be able to identify his weak areas in his preparation to strategize his preparation accordingly.
* The user can practice a vast set of problems of which he can set the difficulty. The user will also be allowed to practice problems in a particular category only if he feels so.

# End users:

Competitive exam aspirants and program administrator.

# Highlighted features:

The program will basically have three main sections:

1. **E-learning:** Learn concepts, practice from ground zero in a particular topic, jump to a topic.
2. **Series cracker:** User enters the first four terms of any series. The program calculates the next three terms and explains the logic also. In case the program cannot crack, the user will be allowed to convey this message to the administrator.
3. **Quiz section:** The user can practice problems, identify his weak areas and get statistical data about his performance.

The administrator can:

1. Generate data for any particular user
2. Generate data for any particular topic
3. Identify the easiest and toughest problems in general based on accuracy and time spent of users.
4. Read the inputs from users about the series problems not solved by the program.

# Important system outputs:

Average time spent for any question, weak topics, strong topics - for one student as well as for all students. List of easiest and toughest problems based on accuracy and time spent.