Derive an algorithm to find difficulty of a question given the following details

The difficulty of a questions can be determined by two methods

I) Difficulty Index

2) Discrimination Index

Formula:

Difficulty Index=B/J;

Where,

B=No. Of Students given Correct Answer

J=No. Of total Students written the exam

Discrimination Index=(A - B)/ 0.5 N;

Where,

N – total no. of correct responses

A = the number of students in the upper 27% who responded correctly

B = the number of students in the lower 27% who responded Wrongly.

Pseudocode:

The application contains 7 classes & 1 interfaces, which is scalable up to maximum input & user.

Code:

```
Class Question{
        Contains fields for question & Option
        Constructor for initialization
}
Class Answer{
        Contains fileds for Answer
        Constructor for initialization
}
Class  Quiz{
    void begin(){
    initialize the objects for questions & answers
    Stores the object in Question array
    traverse  the array
    Shown the questions to the user & get the answer from the user & stores it in one array.
    Shown the results for each user
}
```

Interface IResults{

Which acts as a interface for Results class

}

Class Results{

It shows the overall result for each user

It calculates the percentage & performance of the User

It calculates the difficulty index of the Questions & gives as a output .

}

Class QuizApplication{

It acts as a main class

}

Conclusion:

The attached Software package contains a intermediate level Quiz Application, which I developed. I tried to update that package, according to your given statement.