**DAYANANDA SAGAR COLLEGE OF ENGINEERING**

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

***(An Autonomous Institution Affiliated to VTU, Belgaum)***

**ShavigeMalleshwara Hills, Kumarswamy Layout, Bangalore -560078**

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**Mini Project REPORT**

**(DESIGN AND ANALYSIS OF ALGORITHMS)**

**“PASSWORD CRACKING USING PERMUTATIONS OF GIVEN STRING”**

Submitted in partial fulfillment of the requirements for the award of AAT Marks in the subject:

**“DESIGN AND ALANLYSIS OF ALGORITHMS”** of **4th Semester** Degree of Bachelor of Engineering.

**Submitted By**

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| --- | --- | --- |
| **SL#** | **USN** | **NAME** |
|  | 1DS17CS038 | GAURI PANDIT |
|  | 1DS17CS033 | CHANDANA VIJAYAKUMAR |
|  | 1DS17CS035 | DIVYA P HATHWAR |

**Under the guidance of**

Prof. Harish Kumar N

Assistant Professor, Dept. of CSE, DSCE

**Marks secured (to be evaluated by the course instructor)**

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| **SL#** | **USN** | **NAME** | **TOTAL MARKS(10)** |
|  | 1DS17CS038 | GAURI PANDIT |  |
|  | 1DS17CS033 | CHANDANA VIJAYAKUMAR |  |
|  | 1DS17CS035 | DIVYA P HATHWAR |  |

**Signature of the students**

**1.**

**2.**

**3.**

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**Signature of Faculty in-charge with date**

**ABSTRACT**

In this given project, we use string matching technique to crack the given password. The password and the string must be of fixed length 5. To generate all permutations of a String in Java, we create an empty Array List to store (partial) permutations. We initialize the list with the first character of the string for every character of the specified string. We then consider previously constructed partial permutation one by one and iterate backwards. Then we remove current partial permutation from the Array List and insert next character of the specified string in all possible positions of current partial permutation. Then insert each of these newly constructed string in the list. If the string equals array, then "password correct" is displayed else we display "password incorrect”.

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