

COMPUTER SCIENCE

PRACTICAL FILE LIST GRADE XII 2024-25

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| **SR NO** | **PROGRAM LIST** |
| 1.  DOE:  15-04-24  DOS:  18-04-24 | Write a program that reads date as an integer in the format MMDDYY.The program will print the date in the format  <Month Name> <Day> <Year> |
| 2.  DOE:  22-04-24  DOS:  24-04-24 | Program to operate on dictionary whose keys are month names and values are  number of days in the corresponding month. |
| 3.  DOE:  27-04-24  DOS:  30-04-24 | Program to create and invoke a function nth root that receives 2 parameters n &  n and returns the nth root. |
| 4.  DOE:  27-04-24  DOS:  30-04-24 | Program to create and invoke a function volume box( ) that calculates and  returns the volume of a box. |
| 5.  DOE:  10-06-24  DOS:  12-06-24 | Program to create and invoke a function calci( ) that calculates addition,  subtraction, multiplication and division of 2 numbers. |
| 6.  DOE:  18-06-24  DOS:  20-06-24 | Write Python functions for the following   1. A function cubeN() that takes a number as argument and calculates and prints cube of it . If there is no value passed to the function then function should calculate cube of 2. 2. A function checkS() that accepts two strings and compares them . If both are equal prints ‘True’ otherwise prints ‘False’   Write a Menu driven program to invoke the above two functions. |
| 7.  DOE:  24-06-24  DOS:  26-06-24 | Program to generate a random number that simulates a dice . |
| 8.  DOE:  26-06-24  DOS:  28-06-24 | **Create a students table** with the following attributes:   * student\_id (INT, Primary Key) * name (VARCHAR(50)) * age (INT) * grade (CHAR(1)) * score (DECIMAL(5,2)) |
| 9.  DOE:  28-06-24  DOS:  01-07-24 | **Insert the following data** into the students table.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Student\_id | Name | Age | Grade | Score | | | 1 | Alice | 20 | A | 85.5 | | | 2 | Bob | 21 | B | 78.0 | | | 3 | Charlie | 22 | A | 92.0 | | | 4 | David | 23 | C | 68.5 | | | 5 | Eve | 21 | B | 74.3 | |
| 10.  DOE:  03-07-24  DOS:  05-07-24 | **Perform the following operations on the students table:**  a. ALTER TABLE:   * Add a new attribute email (VARCHAR(100)). * Modify the data type of score to DECIMAL(6,2). * Drop the attribute email.   b. UPDATE:   * Update the score of the student with student\_id = 1 to 88.5.   c. ORDER BY:   * Display all records in ascending order by name. * Display all records in descending order by score.   d. DELETE:   * Remove all students with the grade C.   e. GROUP BY:   * Find the minimum score for each grade. * Find the maximum score for each grade. * Find the total sum of scores for each grade. * Count the number of students in each grade. * Calculate the average score for each grade. |
| 11.  DOE:  08-07-24  DOS:  10-07-24 | Write a database connectivity program to fetch all the records from student  table.   |  |  |  | | --- | --- | --- | | Rno | Name | Avg | | 100 | Raj | 76.6 | | 101 | Harish | 89.6 | | 102 | Kiran | 98.9 | | 103 | Vedanth | 92.5 | |
| 12.  DOE:  12-07-24  DOS:  15-07-24 | Write a database connectivity program to insert a new student record to student  table. |
| 13.  DOE:  18-07-24  DOS:  20-07-24 | Write a database connectivity program to fetch all records from the student  table. |
| 14.  DOE:  22-07-24  DOS:  24-07-24 | Write a database connectivity program to delete a student record from student  table. |
| 15.  DOE:  25-07-24  DOS:  29-07-24 | Write a database connectivity program to modify student record of a student  table. |
| 16. | Program to search binary file for roll number and display its name.  (Create a Binary file with Roll No & Names) |
| 17. | Program to search a csv file for password of given userid.  (Create a csv file with UserId & Password) |
| 18. | Program to count number of “He” or “His” in a text file in ‘Story.txt’. Story.txt file content:  King Krishnadevaraya loved horses and had the best collection of horse breeds in the Kingdom. Well, one day, a trader came to the King and told him that he had brought with him a horse of the best breed in Arabia.  He invited the King to inspect the horse. King Krishnadevaraya loved the horse; so the trader said that the King could buy this one and that he had two more like this one, back in Arabia that he would go back to get. The King loved the horse so much that he had to have the other two as well. He paid the trader 5000 gold coins in advance. The trader promised that he would return within two days with the other horses. |

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| 19. | Program to count number of lines starting with ‘w’ in a text file ‘Poem.txt’.  poem.txt file content :  When the gloomy gray sky turns to clear azure blue, And the snow disappears from the ground,  When the birds start to sing, and our moods start to lift, Then we know Spring is coming around.  When the first flower bulbs poke their heads toward the sun, Golden daffodils, hyacinths, too;  When the brown grass turns green, and the wildflowers bloom, Then sweet Spring makes its showy debut. |
| 20. | Write a program to copy the contents from one Binary file to another Binary  file.(‘Sports’.dat –‘Atheletic.dat’) |
| 21. | Program to create and invoke a functioncount\_short\_attendance( ).  The function will read the content from the Binary File& display the students with attendance below 75%.  (Create a Binary file with Roll No ,Names, Attendence) |
| 22. | Program to create a csv file with rollno ,name and age and read all records. |
| 23. | Program to read a text file and display the number of vowels, consonants,  uppercase, lowercase characters are there. |
| 24. | Write a menu driven program to implement stack. |