

Please ensure it is the student's responsibility to complete all assignments on time and as per the lecture schedules. Assignment Kit will help every student gain confidence in the technology as well as get comfort in understanding how industry is working. The assignments are laid out as per exam and lecture schedules.

Module- 1 [C Programming]

1. Display This Information using printf
 - a. Your Name
 - b. Your Birth date
 - c. Your Age
 - d. Your Address
2. Write a program to make addition, Subtraction, Multiplication and Division of Two Numbers.
3. Write a program to make a square and cube of number.
4. Write a program to find the Area of Circle
5. Write a program to find the Area of Triangle
6. Write a program to find the simple Interest.
7. Write a program to convert temperature from degree centigrade to Fahrenheit.
8. Write a program to calculate sum of 5 subjects & find the percentage. Subject marks entered by user.
9. Write a Program to show swap of two No's without using third variable.
10. Write a Program to check the given number is Positive, Negative.
11. Write a Program to check the given year is leap year or not.
12. Write a Program to check the given number is prime or not prime.
13. Write a program to find the Max number from the given three number using Nested If
14. Write a program to find the Max number from the given three number using Ternary Operator
15. Write a program to find the Max number from the given three number using Nested If
16. Write a program user enter the 5 subjects mark. You have to make a total and find the percentage.
percentage > 75 you have to print "Distinction"

percentage > 60 and percentage <= 75 you have to print "First class"
percentage >50 and percentage <= 60 you have to print "Second class"
percentage > 35 and percentage <= 50 you have to print "Pass class"
Otherwise print "Fail"

17. Write Program use switch statement. Display Monday to Sunday
18. Write a Program of Addition, Subtraction ,Multiplication and Division using Switch case.(Must Be Menu Driven)
19. Write a program of to find out the Area of Triangle, Rectangle and Circle using If Condition.(Must Be Menu Driven)
20. Looping Programs
 - a. Write a program to print the 1 to 10 using For loop.
 - b. Write a Program to print the 51 to 60 using while loop
 - c. write a program to print the 100 to 81 using do....while loop
 - d. write a program you have to find the factorial of given number.
 - e. Write a program you have to print the Fibonacci series up to user given number
 - f. write a program you have to print the table of given number.
 - g. Write a program to print the number in reverse order.
 - h. Write a program to find out the max from given number
(E.g. No: -1562 Max number is 6)
 - i. Write a program make a summation of given number(E.g. 1523 ans :-11)
 - j. Write a program you have to make a summation of first and last Digit.
(E.g. 1234 ans:-5)

18. Pyramid Programs

| | | | |
|---|---|---|---|
| * ** *** **** ***** | 1 12 123 1234 12345 | 1 22 333 4444 55555 | * ** *** **** ***** |
| 1 21 321 4321 54321 | * ** *** **** ***** | * * * * * * * * * * * * * * * | 1 1 2 1 2 3 1 2 3 4 1 2 3 4 5 |
| 1 2 2 3 3 3 4 4 4 4 5 5 5 5 5 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 | 1 4 4 9 9 9 16 16 16 16 25 25 25 25 25 |
| * | * | ***** ***** ***** ***** ***** ***** ***** | * |

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|-----|--|--|-----|
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19. Write a program to enter a five elements using Array and print it on a screen.
20. Write a program to enter a five elements using Array and print it on a screen.
21. Write a program to enter a ten elements using Array and find out the total number of odd and even numbers
22. Write a program to enter a ten elements using Array and make a summation of the numbers and average of summation
23. Write a program to find out the max number from given 10 elements of array.
24. Write a program to sort the array of 5 elements
25. Write a program to find out the second smallest number from the array.
26. Write a Program of find the element of given position from the array
27. Write a program to print the Matrix using 2-D Array
28. Write a program of two make Addition of two matrix using 2-D Array.
29. Write a program of two make Subtraction of two matrix using 2-D Array.
30. Write a program of Multiplication make Subtraction of two matrix using 2-D Array.
31. Write a program to find out the Max number from given Matrix
32. Write a program to convert the string from uppercase to lowercase and vice versa
33. Write a program to find out the length of given string without using string function
34. write a program to count the total number of word from given string without using string function
35. Write a program to copy string from one string to another string without using string function
36. Write a program to make string reverse and check the given string is palindrome or not without using string function
37. Write a program to concatenate the two string without using string function
38. Write a program to perform addition, subtraction, multiplication and division of two numbers using Function
39. write a program to find out the Square and cube of given number using function
40. Write a program to find out the factorial of given number using function
41. write a program to print the Fibonacci series using function
42. Write a program to find out the max number from given array using function
43. write a program to sort the array using function
44. write a program to print the string in reverse order using function
45. Write a Program of Factorial using Recursive Function
46. Write a Program of Print a number and check the number is palindrome or not using recursive Function
47. Write a Program of Make a string reverse using recursive Function.
48. Write a program of structure employee that provides the following information
 - print and display empno,empname,address and age
49. Write a program of structure for five employee that provides the following information
 - print and display empno,empname,address and age

50. Describe the structure student having rollno and marks of three subjects of five students.

-Write a program to print all the information and total marks and percentage of each student.

51. Write program to make a addition of two number using pointer

52. write a program to swap the two numbers without using third variable using pointer

53. Write a program to concatenate the string using pointer.

54. Write a program to sort the numbers using pointer and functions

55. Write a program of singly link list (Using Dynamic Memory Allocation)

-To add The elements in link list

- To Remove the elements from link list

-To display the element from the link list

-Write a program to write data in file.

56. Write a program to read data from file.

57. Write a program to read and write data from the file.

58. Write a program to append data into already existed file.

59. Create Macro in program using Preprocessor.

1. Module – 2[C++ Programming]

2. Write a program of Fibonacci and factorial using Class

3. Write a program to Addition, Subtraction, Multiplication, and Division of two numbers using Class

4. Write a program of to display a matrix using class

5. Write a program of Addition of two Matrix using Class.

6. Define a class to represent a bank account. Include the following members:

Data Member:

-Name of the depositor

-Account Number

-Type of Account

-Balance amount in the account

Member Functions

-To assign values

-To deposited an amount

-To withdraw an amount after checking balance

-To display name and balance

7. Define a class to represent a book shop Include the following members:

Data Member:

-Name of Author

-Name of Title

-Name of Price

-Name Publisher

Member Functions

-To Assign Values

-To Display Values

8. Define a class to represent lecture details. Include the following members and the program should handle at least details of 5 lecturer.

Data members

Name of the lecturer
Name of the subject
Name of course
Number of lecturers

Data functions

To assign initial values
To add a lecture details
To display name and lecture details

9. Write a program of to display in this format using class

| Roll No | Sub1 | Sub2 | Sub3 | Total | Percentage |
|---------|------|------|------|-------|------------|
| 1 | 30 | 25 | 45 | 100 | |
| 2 | 25 | 20 | 25 | 70 | |
| 3 | 20 | 15 | 35 | 70 | |
| 4 | 35 | 30 | 40 | 105 | |

29. Write a program of Addition, Subtraction, Division, Multiplication using constructor.
30. Write a program of find the simple interest using constructor with dynamic initialization. Make constructor like
Interest (int principal, int year, int rate)
Interest (int principal, int year, float rate = 2.5)
31. Write a program to calculate the area of circle, rectangle and triangle using Function Overloading
Circle: $\text{Pi} * \text{Area} * \text{Area}$;
Rectangle: $\text{Area} * \text{breadth}$
Triangle: $\frac{1}{2} * \text{Area} * \text{breadth}$
32. Write a program to find the multiplication values and the cubic values using inline function.
33. Write a program to Mathematic operation like Addition, Subtraction, Multiplication, Division Of two number using different parameters and Function Overloading
34. Write a Program of Two 1D Matrix Addition using Operator Overloading
35. Write a program of to concatenate the two strings using Operator Overloading
36. Write a program of Addition, subtraction and multiplication of two numbers using Binary Operator overloading with switch case.
37. Assume a class cricketer is declared. Declare a derived class batsman from cricketer .Data member of batsman. Total runs, Average runs and best performance. Member functions input data, calculate average runs, Display data. (Single Inheritance)
38. Create a class person having members name and age. Derive a class student having member percentage. Derive another class teacher having member salary. Write necessary member function to initialize, read and write data. Write also Main function (Multiple Inheritance)
39. Assume that the test results of a batch of students are stored in three different classes. Class Students are stores the roll number. Class Test stores the marks obtained in two subjects and class result contains the total marks obtained in the test. The class result can inherit the details of the marks obtained in the test and roll number of students. (Multilevel Inheritance)

40. Assume that a bank maintains two kinds of accounts for customer, one called as saving account and other as current accounts provides Simple interest and withdraw facilities but no cheque book facility. The current account provides cheque book facility but no interest. Current account holders should maintain a minimum balance and if the balance falls below this level a service charges is imposed

Create a class account that stores customer name, account number and type of account. From this derive classes curr_acc and sav_acct to make them more specific to their requirements Include necessary member functions in order to achieve the following tasks

- a. Accepts deposit from a customer and update balance.
 - b. Display the balance.
 - c. Compute and deposit interest.
 - d. Permit withdraws and updates the balance.
 - e. Check for the minimum balance, impose penalty, necessary and update the balance.
41. Write a program to find the multiplication values and the cubic values using inline function.
42. Write a program to find the max number from given two numbers using friend function
43. Write a program to swap the two numbers using friend function
44. Write a program to swap the two numbers using friend function
(Not Use of third variable)
45. Write a program to add data in text File.
46. Write a program to read data from text file.
47. Write a program to read and write data in to file.
48. Write a Program to read and write data into file using class Object.
49. Write a program of to swap the two values using templates
50. Write a program of to sort the array using templates.
51. create a example of use delete and new operator.