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**Open-Ended Questions**

|  |  |
| --- | --- |
| S.No. | PROGRAMS |
| 1. | A library charges a fine for every book returned late. For first 5 days fine is 50 paise, for 6-10 days fine is one rupees and above 10 days fine is 5 rupees. If you return the books after 30 days your membership will be cancelled. Write a program to accept the number of days the member is late to return the book and display the fine or appropriate message. |
| 2. | With the help of an example explain how an array can be passed to a function? Is it possible to send just a single element of the array to a function? |
| 3. | A library charges a fine for every book returned late. For first 5 days fine is 50 paise, for 6-10 days fine is one rupees and above 10 days fine is 5 rupees. If you return the books after 30 days your membership will be cancelled. Write a program to accept the number of days the member is late to return the book and display the fine or appropriate message. |

Program 1

# Question:

Input two numbers and print their sum.

# Code:

import java.util.\*;

class Main {

public static void main(String[] args) {

int a, b, sum;

Scanner sc = new Scanner(System.in);

System.out.println("Enter the numbers which have to be added: ");

a = sc.nextInt();

b = sc.nextInt();

sum = a + b;

System.out.print("The sum of the given numbers is: ");

System.out.print(sum);

}

}

Program 2

# Question:

Input principal amount, rate and time and calculate S.I.

# Code:

import java.util.\*;

class Main {

public static void main(String[] args) {

int p, t;

float r, SI;

Scanner sc = new Scanner(System.in);

System.out.println("Enter the principal amount, rate and time: ");

p = sc.nextInt();

r = sc.nextFloat();

t = sc.nextInt();

SI = p \* r \* t / 100;

System.out.print("The Simple Interest is: ");

System.out.print(SI);

}

}

Program 3

# Question:

Input length and breadth and calculate area of rectangle

# Code:

import java.util.\*;

class Main {

public static void main(String[] args) {

float l, b, area;

Scanner sc = new Scanner(System.in);

System.out.println("Enter the length and breadth of the rectangle: ");

l = sc.nextInt();

b = sc.nextFloat();

area = l \* b;

System.out.print("The area of the rectangle is: ");

System.out.print(area);

}

}

Program 4

# Question:

Input the side and calculate area of square.

# Code:

Program 5

# Question:

Input radius and calculate area and circumference of circle.

# Code:

Program 6

# Question:

Input base and height and calculate area of triangle

# Code:

Program 7

# Question:

If Basic salary is input through keyboard write a program to calculate gross salary. Where,

da is 10% of bs.

ta is 12% of bs.

hra is 10% of bs.

# Code:

Program 8

# Question:

Input temperature in Fahrenheit and convert into Celsius.

# Code:

Program 9

# Question:

Input two numbers and swap them.

# Code:

Program 10

# Question:

Input 5-digit numbers and calculate sum of its digits.

# Code:

Program 11

# Question:

Input two numbers and print the greater number.

# Code:

Program 12

# Question:

Input a number and check if it is even or odd.

# Code:

Program 13

# Question:

Input a number and check if it is Armstrong.

# Code:

Program 14

# Question:

Display reverse of a number.

# Code:

Program 15

# Question:

Input a number and check if it is palindrome or not.

# Code:

Program 16

# Question:

Generate Fibonacci series.

# Code:

Program 17

# Question:

Display pattern below

\*

\*\*

\*\*\*

\*\*\*\*

# Code:

Program 18

# Question:

Display the pattern below

1

12

123

1234

# Code:

Program 19

# Question:

Display the pattern below

\*\*\*\*

\*\*\*

\*\*

\*

# Code:

Program 20

# Question:

Input an alphabet and check it is vowel or not.

# Code:

Program 21

# Question:

Design a calculator.

# Code:

Program 22

# Question:

Write a program Input the marks and print the remarks.

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Program 23

# Question:

Write a program enter three number and find Largest among 3 numbers.

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# Question:

Write a program to find Average of the elements of an array.

# Code:

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# Question:

Write a program to find largest element of an array.

# Code:

Program 26

# Question:

Write a program for Linear search.

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# Question:

Write a program input two array and Merge.

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Program 28

# Question:

Write a program Selection sort.

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Write a program for Transpose of a matrix.

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# Question:

Write a program for Sum of two numbers using functions.

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Write a program for Swap two numbers using functions.

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Write a program for Armstrong number using function.

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Write a program for Add two number using call by reference.

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Write a program for Sum of digits of a number using function.

# Code:

Program 41

# Question:

Write a Cprogramtocopycontentsofonefiletoanotherfile

# Code:

Open Ended Questions

# Question 1:

A library charges a fine for every book returned late. For first 5 days fine is 50 paise, for 6-10 days fine is one rupees and above 10 days fine is 5 rupees. If you return the books after 30 days your membership will be cancelled. Write a program to accept the number of days the member is late to return the book and display the fine or appropriate message.

# Code:

Open Ended Questions

# Question 2:

With the help of an example explain how an array can be passed to a function? Is it possible to send just a single element of the array to a function?

# Code:

Open Ended Questions

# Question 3:

Define a structure data type called TStruct containing 3 members called hour, minute and second. Develop a program that would assign values to the individual members and display the time in the form 16:40:30

# Code: