Programming Fundamentals Practice Questions

In the realm of programming, the journey **begins** with the **fundamentals**, and it's during this crucial phase that the foundation for a successful career is laid. The introductory programming course is not just a prerequisite; it's a pivotal stepping stone in your career path. It doesn't matter you belongs to which department either it is **CS**, **SE** or **AI**, programming is the Key to perform well in the university as well as in the **trending market**. It's here that you'll learn the syntax, logic, and problem-solving skills that will serve as your tools in the digital world. But it's not enough to merely grasp the concepts; it's about mastering them. **Practice is the key** to mastery, and this course is your playground. The more you immerse yourself in coding exercises and **problem-solving challenges**, the more **confident** and **skilled** you become. Remember, every line of code you write is a step toward becoming a proficient programmer. So, embrace the practice, relish the challenges, and strive for mastery. At the end, I would like to **emphasize** that the knowledge and skills you gain during this practice will not only shape your this journey but also open doors to countless opportunities in the ever-evolving tech industry. If anyone need more practice questions or need any support, email me.
Your future in the world of technology starts here.

Variables Declaration, Data Types Operators:

1. Write a program in which to declare all data type like integer ,double, float,long int and

   print value in specified format

2. Write a program to calculate the simple interest

3. Write a program to find the average of three number

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5. Write a program to compare two no by using of ternary operator in c.

6. Write a program to use of bitwise operator (left shift and right shift).

7. Write a program in c to convert the temperature centigrade into Fahrenheit.

Conditional and Branching Statement, Loops:

8. Write a program in c for increment and decrement operator.

9. Write a program to check whether enter year is leap or not(if …else)

10. Write a program to find even and odd no by using if else statement.

11. Write a program to find largest among three no using nested if statement.

12. Write a program to take input of 5 subject . find total and calculate percent. On the basis of percent provide grade like:

IF Per > 80 "A+"

Per >= 65 and per <=80 "A"

Per > =50 and per <=65 "B"

Per >= 42 and per <=50 "C"

Per < 42 "Fail"

13. Write a program in C to read any Month Number in integer and display Month name in the word.(using switch case)

14. Write a program to print multiplication table of given number.

15. Write a program by using switch case if user enter 11 it will have are area of circle and when user enter 22 it will have area of rectangle and when user enter 33 it will give area of square when user enter 44 it will give area of triangle.

16. Write a program in C to print sum of odd no between 0 and 10 using continue.

17. Write a program in c using goto statement

18. Write a program to find Fibonacci series upto n terms

19. Write a program in c to check whether the no is prime or not

20. Write a program in c to sum of 5 digits.

21. Write a program to convert decimal to binary.

22. Write a program in c to check Armstrong no.

23. Write a c program to the following pattern:

```
*

* *

* * *

* * * *
```

24. Write a c program to the following pattern:

```
1

1 2

1 2 3

1 2 3 4
```

25. Write a c program to the following pattern:

```
1

2 3

4 5 6

7 8 9 10
```

26. Write a c program to the following pattern:

```
        *

      *   *

    *   *   *

  *   *   *   *
```

27. Write a program to the following pattern:

     A

     A B

     A B C

28. Write a program to the following pattern:

     A

     B C

     D E F

     G H I J

29. Write a program in c to perform math and character library function using switch case.

30. Write a program to demonstrate the command line argument.

31. Write a program to swapping of two number using call by value and call by reference.

32. Write a program to differentiate local and global variable.

33. Write a c program to show the use of static variable.

34. calculate the volume through function.

35. write a program to find area of circle and area of rectangle using the function return type.

36. Write a program to add two no by using 4th category of function(Return type with argument)

37. Write a program in C to read 10 numbers from keyboard and find their sum and average.

38. Write a program to find factorial of a number using recursion.
39. Write a c program to calculate power using recursion

Array, Strings, Structures, Union:

40. Write a program to take input of 10 element, store and display it using one

    Dimensional array (using function).

41. Write a program to find sum of 10 natural no using 1-D array.

42. Write a program in c to search an element from an array by linear search method.

43. Write a program in c to sort element of array in ascending order.

44. Write a program in c to perform addition of two matrix.

45. Write a program in c to perform multiplication of two matrix.

46. Write a program to find Transpose of a matrix.

47. Write a program to print String and findout their length without using library function.

48. Write a program to copy one String into another String without using library function.

49. Write a c program to perform string manipulation by Using library function.

50. Write a program to check entered string is palindrome or not.

51. Write a c program to read and print an employee's details like name,employee id,salary

    etc. using structure.

52. Create a structure student having data members to store roll number, name of

student,name of three subjects, max marks.mim marks.Declare a structure variable of

student to provide facilities to input data in data member and display result of student.

53. Write a c program to demonstrate structure of array.

54. Create a user defined type enum days of week and display all.

Pointers:

55. Write a program in c to find the sum of an array element using pointer and function.

56. Write a program to sum of two no using pointer.

57. Write a program in c to show the pointer to pointer.

58. Write a program in c to find the maximum number between two number using a

59. Pointers.

60. Write a c program to read and print the student details using structure and Dynamic memory Allocation. Using malloc().

61. Write a program in c to create a float array dynamically using calloc().input values and display.

File Handling:

62. Write a program in c to create a text file .write contents using fprintf and read from file using fscanf

63. Write a program in c to create a text file .write contents using fwrite and read from file using freadf

64. Write a program to demonstrate fseek and rewind.