Basic Assignments

1. WAP to calculate the sum of two variables.
2. WAP to calculate the sum of two variables whose value is p=2.5 and q=3.6.
3. WAP to calculate simple interest. (si=p*n*r)/100.
4. WAP to calculate area of rectangle. (a_rec=l*b).
5. WAP to calculate area of circle (a cir=pi*r*r).
6. WAP to calculate multiplication of three numbers.
7. WAP to interchange the values of two variables with using third variable.
8. WAP to interchange the values of two variables without using third variable.
9. WAP to add, sub, mul, div, mod two variables and print the result.
10. WAP to calculate the third angle when two angles are input through the keyboard.
11. Ramesh's basic salary is input through the keyboard his DA is 40% of the basic salary and H.R.A is 25%, P.F=20% and TA is 30% of the basic salary.WAP to calculate the gross salary and net salary.
12. WAP to calculate the surface of the cylinder.(2*pi*r*h)
13. WAP to calculate the total and avg of five subjects.
14. WAP to convert the temperature Fahrenheit degree into degree celcius.
Celsius = ((Fahrenheit - 32) / (1.8)) & Fahrenheit = (1.8* Celsius) + 32;
15. WAP to calculate the sum of individual digit of a 4 digit number. (d1=n%10;n=n/10).
16. WAP to calculate the circumference of the circle. (2*pi*r).
17. WAP to compute Quotient and Remainder.
18. WAP to find ASCII value of a character.
19. WAP to find the size of int, float, double and char.
20. Input a four digit number from the keyboard. WAP to reverse that number.
21. Input a four digit number from the keyboard. WAP to obtain sum of first and last digit of the number.
22. WAP to calculate the perimeter of the rectangle.(2*(l+b)).

Day 1 (Level up Question)

1.Calculate the Factorial of a Number

2. Find the Prime Numbers in a Range

3. Implement a Simple Calculator

4. Write a C program to check if it is a palindrome number
or not using a recursive method.

5. Write a C program to Subtract Two Numbers Without
Using the Subtraction Operator

6. Write a C program to remove duplicates in a given array?

7.A number is entered through the keyboard.the number may contain 1,2,3,4 or 5 digits.Write a program to find a number of digits in the number.

8.Super-Duper Micros Currently sells 100 Super-Duper per month at a profit of Rs.500/- per Super-Duper.They have a fixed operating cost of Rs 10,000/-that does not depend on the volume of sales.They currently spend Rs 1000/- per month on advertising. A marketing consultant advised them that if they double the amount spent on advertising, sales will increase by 20%.Write a program that begins with the Company's current status,successively doubles the amountspent on advertising until the net profit begins to decline.Have a program print number of Super-Duper sales,the advertising budget,and the net profit just before the profit begins to decline.

9.if a number 972 is entered through the keyboard your program should print "Nine Seventy Two".Write the program such that it does this for any positive Integer.

10. (a) Consider a Currency System in which there are notes of seven denominations ,namely, Re.1,Rs2,Rs,5,Rs 10,Rs 50,Rs 100. If a sum of Rs.N is entered through the keyboard,write a program to compute the smallest number of notes that will combine to give Rs.N.

10 (b)The Policy followed by a company to process customer orders
Is given by the following rules:

(a)If a customer order is less than or equal to that in stock and has credit is OK,supply has requirement.

(b) If has credit is not OK do not supply. Send him intimation.

(c) If has credit is OK but the item in stock is less than has order ,supply what is in stock. Intimate to him data the balance will be shipped.

Decision Making Statements

Simple if and if else

1.WAP to compare two numbers.
2.WAP to calculate total amount if purchase amount is greater than 1500 then discount is Rs. 200.
3.WAP to calculate commission if sale amount is greater than 1000
then commission =15%.
4.WAP to find entered number is even or odd
5.WAP to check whether the character is vowel or consonant.

Nested if else

1.WAP to check greater of three numbers.
2.WAP to check greater of four numbers.
3.WAP to check greater of five numbers.

Else if ladder

1.A student appear in examination of five papers each paper contains 50 marks calculate total and percentage of student and display the grades according to the following condition.

Percentage	Grade
>=90	A+
80 to 89	A
70 to 79	B+
60 to 69	B
50 to 59	C
40 to 49	Fail.

2.WAP to check whether a number is divisible according to the following conditions.
1. no is divisible by 8 & 5;
2.no is divisible by 8;
3.no is divisible by 5;
4.no is divisible neither by 8 nor by 5;

Switch Case

1.WAP to enter a character from user and check whether it is vowel or consonants.
2.WAP to convert Celsius to Fahrenheit and vice versa.
3.WAP for addition, subtraction, multiplication and division using switch case.
4.WA P menu driven program for even odd, prime number, Armstrong ,palindrome.

GOTO

1.WAP to perform the use of goto statement.
2. WAP to print values from 1 to 5. (like loop).
3.WAP to print greater no. from 2.
4. WAP to print the square root of a number.

Loops(while , do while and for)

1. WAP to print numbers from 1 to 10.
2. WAP to print numbers in decreasing order from 10 to 1.
3. WAP to print even numbers from 1 to 10.
4. WAP to print the sum of the first 10 numbers.
5. WAP to calculate the factorial of a number.
6. WAP to print the sum of individual five digit numbers.
7. WAP to find the entered number is Armstrong or not.
8.WAP to find if the number is prime or not.
9.WAP to find whether the number is palindrome or not.
10.WAP to reverse the integer number.
11.WAP to find the Fibonacci series up to given terms.
12.WAP to print the following pattern

1	*	1	5	A
1 2	* *	1 0	5 4	A B
1 2 3	* * *	1 0 1	5 4 3	A B C
1 2 3 4	* * * *	1 0 1 0	5 4 3 2	A B C D
1 2 3 4 5	* * * * *	1 0 1 0 1	5 4 3 2 1	A B C D E

Patterns using loops

A)

```
       *         |         1         |         A
      * * *      |       1 2 3       |       A B C
    * * * * *    |     1 2 3 4 5     |     A B C D E
  * * * * * * *  |   1 2 3 4 5 6 7   |   A B C D E F G
* * * * * * * * * | 1 2 3 4 5 6 7 8 9 | A B C D E F G H I
```

B)

```
       *         |         1         |         A
     * * *       |       1 2 3       |       A B C
   * * * * *     |     1 2 3 4 5     |     A B C D E
 * * * * * * *   |   1 2 3 4 5 6 7   |   A B C D E F G
* * * * * * * * * | 1 2 3 4 5 6 7 8 9 | A B C D E F G H I
 * * * * * * *   |   1 2 3 4 5 6 7   |   A B C D E F G
   * * * * *     |     1 2 3 4 5     |     A B C D E
     * * *       |       1 2 3       |       A B C
       *         |         1         |         A
```

C)

```
* * * * * * * * * | 1 2 3 4 5 6 7 8 9 | A B C D E F G H I
 * * * * * * *   |   1 2 3 4 5 6 7   |   A B C D E F G
   * * * * *     |     1 2 3 4 5     |     A B C D E
     * * *       |       1 2 3       |       A B C
       *         |         1         |         A
     * * *       |       1 2 3       |       A B C
   * * * * *     |     1 2 3 4 5     |     A B C D E
 * * * * * * *   |   1 2 3 4 5 6 7   |   A B C D E F G
* * * * * * * * * | 1 2 3 4 5 6 7 8 9 | A B C D E F G H I
```

D)

```
* * * * *  |  1 2 3 4 5  |  A B C D E
*       *  |  1       5  |  A       E
*       *  |  1       5  |  A       E
*       *  |  1       5  |  A       E
* * * * *  |  1 2 3 4 5  |  A B C D E
```

E)

```
      *         |          1          |          A
     *   *      |        1   3        |        A   C
    *     *     |      1       5      |      A       E
   *       *    |    1           7    |    A           G
* * * * * * * * | 1 2 3 4 5 6 7 8 9   | A B C D E F G H I
```

F)

```
* * * * * * * * | 1 2 3 4 5 6 7 8 9   | A B C D E F G H I
   *       *    |    1           7    |    A           G
    *     *     |      1       5      |      A       E
     *   *      |        1   3        |        A   C
      *         |          1          |          A
     *   *      |        1   3        |        A   C
    *     *     |      1       5      |      A       E
   *       *    |    1           7    |    A           G
* * * * * * * * | 1 2 3 4 5 6 7 8 9   | A B C D E F G H I
```

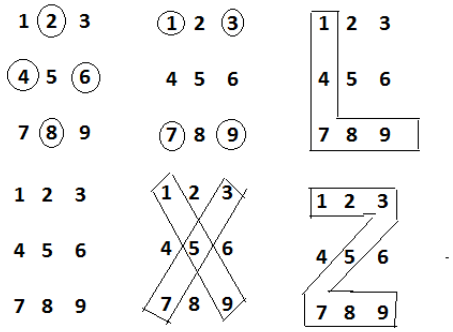
ARRAYS

One Dimensional Array

1.WAP to print the element of the array.
2.WAP to add the element of the array.
3.WAP to show an even number in an array.
4.WAP to show the prime number in the array.
5.WAP to find the biggest element in the array.
6.WAP to enter marks of five subjects and calculate total and print the average using array.

Two Dimensional Array

1.WAP to enter the element in 2d array and print it on the screen.
2.WAP to add the elements of 2d array.
3.WAP to subtract the element of 2d array.
4.WAP to multiply the elements of 2d array.
5.WAP to transpose the 2d matrix.



String

Using Loops

1.WAP to print all characters in a string.
2.WAP to print the vowel in a string.
3.WAP to print the first and the last character of the string.
4.WAP to print the reverse of the string.
5.WAP to find the length of the string.

Using String Function (string.h)

1.WAP to concatenate two strings.
2.WAP to find the length of the string using the library function.
3.WAP to reverse a string using the library function.
4.WAP to copy a string into another string.
5.WAP to compare two strings.

Functions

With 4 ways

1. **Without Return Without Arguments.**
2. **Without Return With Arguments.**
3. **With Return Without Arguments.**
4. **With Return With Arguments.**

1.WAP to find the addition of two numbers using a function.
2.WAP to find the factorial of the number using the function.
3.WAP to calculate the area of the rectangle using a function.
4.WAP to find the square of the number.
5.WAP to swap the values using a function.
6.WAP to find the even odd number using the function.
7.WAP to find simple interest using a function.
8.WAP to find the prime number.
9. WAP to check whether no. is armstrong or not.
10. WAP to check no. is palindrome or not.