Assignment -1

1. WAP in C to print binary of integer number using for loop , while loop and goto .

2. WAP for swapping first and last nibbles in given short integer [2 byte] .
Ex . i/p num = 63 .
It's binary : 0000 0000 0011 **1111**
After swap : **1111** 0000 0011 0000

3. WAP to reverse the bits of given character.
Ex. i/p char is 'O' // ascii is 79
It's binary : 0100 1111
After reverse : 1111 0010

4. WAP to find num is divisble by 8 or not .
using bitwise operator and ternary operator
Ex1. i/p 40 o/p : yes
Ex2. i/p 62 o/p : no

5. WAP to rotate the bits of given short int num.
Ex. i/p num is 31 , rotate bit is 3
It's binary : 0000 0000 0001 1**111**
After rotate : **111**0 0000 0000 0011

6. WAP to delete no of bit from particular position in given number .
Ex. i/p num = 511 , bit = 4 , pos =2
00000000 00000000 00000001 11**1111**11
after deleting 4 bit fron 2nd pos .
00000000 00000000 00000000 00011111

7. WAP to reverse 1st 6bit to last 6 bit .
Ex. i/p int n = 995;
00000000 00000000 00000011 11**100011**
after reversing 6 bit only
11000100 00000000 00000011 11**000000**

8. WAP to set 1st nibble ,clear 2nd nibble , toggle 3rd nibble without loop.
Ex. i/p unsigned short int k=0xA5F0

It's binary : 1010 0101 1111 0000
o/p binary : 1010 1010 0000 1111

9.WAP sum of even digit of given number.
[check digit is even or not using bitwise]
Ex. i/p : 7722494 o/p : 12

10.WAP in C to count set bit , then check count is prime num or not using goto and for loop.
Ex. i/p : 10 , count =2 , yes Prime

Theory Questions

1. What is Embedded systems ?

2. What is software and hardware ?

3. What is operating system ?

4. What is Programming language ?

5.What is role of C in embedded system.

6. What is cross compiler and native compiler ?

7. Explain cat ,mkdir ,cc, rmdir , mv, rm, cd command with example.

8. Diffrence b/w refrence path and absolute path.

9. Write a C program without main function .

10. Explain types of error with example.

11. Write compilation stages and command .

12. What is task of pre-processor stage .

13. What is Fatal error , Linked error , FPE error , explain with program .

14. What is data type , rules to declare variables .

15. What is range of signed char and unsigned char .

16. What is data type , rules to declare variables.

17. Write block diagram of your Btech or Mtech project with explanation .

18. What is typecasting explain with example.

19. Explain break, return , continue with program .

20. What is volatile , explain with example .

21. Explain forward goto with example .

22. Explain all bitwise operator with example.

23. What is code optimaization .

24. Write all step of IEEE754 for float and double.

25. What is pointer ,application of pointers.

Assignment -2

1.WAP in C to find sum of digits using goto .

WAP in C to count even digits using do-while loop.

WAP in C to find product of odd digit using for loop.

4. WAP in C to print factor of number using goto.

5.WAP in C to print sum of first n natural number.

WAP in C to print factorial of num using while loop.

7. WAP in C to check given number is prime number or not using goto.

8. WAP in C to check given number is perfect number or not using while loop .

9. WAP in C to check given number is palindrome number or not using do-while loop.

10. WAP in C to check given number is armstrong number or not using for loop.

11. WAP in C to check given number is strong number or not using while loop.

12. WAP in C to check given number is positive (+ve) negative(-ve) or zero(0) using switch case.

13. WAP in C to check num is prime or perfect or strong or armstrong number using switch case.

14. WAP in C to implement Calculator using switch

WAP in C to count prime digit using do-while loop.
i/p: int n=34567 ,c=0;
o/p: c=3

16.WAP in C to count perfect digit using while loop.
i/p: int n= 34686 , c=0 ;
o/p: c=2;

WAP in C to print and count prime no b/w 2 to 17.

18. WAP in C to print 1st 5 prime num from 5.

19. WAP in C to print alternative prime number b/w 5 to 35 using while loop.

20. WAP in C to print and count palindrome no b/w 88 to 131.

21.WAP in C to print 1st 5 palindrome num from 55.

22. WAP in C to print alternative palindrome number b/w 111 to 222 using while loop.

23. WAP in C to print and count armstrong no b/w 6 to 666 using for loop inside while loop.

24. WAP in C to print 1st 5 armstrong num from 5.

25. WAP in C to print alternative armstrong number b/w 4 to 444 using while loop.

WAP in C to print and count perfect no b/w 2 to 502.

27. WAP in Cto print fibonacii series b/w 0 to 31

28.WAP in C to print multiplication table from 2 to 9

29. WAP in C to print 1st 2 perfect num from 3.

WAP in C to print and count strong no b/w 1 to 222.

WAP in C to print sum of all strong no b/w 2 to 199.

32. WAP in C to delete a digit from number .
i/p: int n= 234527 ,d=2
o/p : 3457

33. WAP in C to delete odd digits from num.
i/p: 2343356
o/p: 246

34. WAP in C to delete prime digits from num.
i/p: 3445625
o/p: 446

35. WAP in C delete first 2 digit from num.
i/p: 234567
o/p: 4567

36. WAP in C to shift odd digit right side in num.
i/p: 2345
o/p: 2435

37. WAP in C to delete a digit from number with only 1 loop .
i/p: int n= 254557 ,d=5
o/p : 247

if you found any mistake or doubts send mail to pawan.ky@vectorindia.org [Pawan KY]

after learning function topics write above all 37 program using function .