Tutorial Sheet : Recursion

Q1. Write a program to find the factorial of a number using recursion.
Sample Input :
5
Sample Output :
120

Q2. Write a program to check if the given number is palindrome or not.
Sample Input :
121
Sample Output :
Palindrome

Q3. Define a function mult(m, n) to find the product of two numbers using recursive addition.
Sample Input :
5
2
Sample Output :
10

Q4. Write a C++ program to compute a^b using recursion.
Sample Input :
4 2
Sample Output :
16

Q5. Write a C++ program to compute sum of digits of a number using recursion.
Sample Input :
1452
Sample Output :
12

Q6. Write a C++ program to reverse the digits of a number using recursion.
Sample Input :
1452
Sample Output :
2541

Q7. Write a program to find the nth number in fibonacci series using recursion.
Sample Input :
6
Sample Output :
5

Q8. Write a C++ program to compute GCD of two numbers using recursion.
Sample Input :
30 35
Sample Output :
5

Q9. Write a C++ program to compute Decimal equivalent of a Binary Number (represented as decimal integer).
Sample Input :
1010
Sample Output :
10

Q10. Write a C++ program to convert decimal number to binary number using recursion.
Sample Input :
10
Sample Output :
1010

Q11. Write a C++ program to find max of an array using recursion.
Sample Input :
5
10 20 25 12 3
Sample Output :
25

Q12. Write a C++ program to find sum of an array using recursion.
Sample Input :
5
1 2 3 4 5
Sample Output :
15

Q13. Write a program to reverse an array using recursion.
Sample Input :
5
1 2 3 4 5
Sample Output :
5 4 3 2 1