**Lab Tasks:**

* **1: Write a program in C++ to find the sum of the first 10 natural numbers. .**

| Solution |
| --- |
| Paste your code here:  #include <iostream>  using namespace std;  int main() {  cout << "Sum of first 10 natural Numbers " << '\n';  int a, sum = 0;  for (a = 1; a <= 10; a++) {  cout << "Sum= " << sum << '\n';  sum = sum + a;  }  return 0;  } |
| Output: |

**2. Write a C++ program to Print Table of any Number**

| Solution |
| --- |
| Paste your code here:  #include <iostream>  using namespace std;  int main() {  int a, i;  cout << "Enter any digit= ";  cin >> a;  for (i = 1; i <= 10; i++) {  cout << a << " x " << i << " = " << i \* a << '\n';  }  return 0;  } |
| Output: |

**3. Write a Program to Generate Factorial. A Certain Number Factorial of any number is the product of an integer and all the integers below it for example factorial of 4 is: 4! = 4 \* 3 \* 2 \* 1 = 24.**

| Solution |
| --- |
| Paste your code here:  #include<iostream>  using namespace std;  int main() {  int num, factorial = 1;  cout << " Enter Number To Find Its Factorial: ";  cin >> num;  for (int a = 1; a <= num; a++)  {  factorial = factorial \* a;  cout << num << "!" << " \* " << a << " = " << factorial << '\n';  }    return 0;  } |
| Output: |

**4. Write a C++ program to generate Fibonacci sequences up to a certain number input by user.**

| Solution |
| --- |
| Paste your code here:  #include<iostream>  using namespace std;  int main() {    int value1, first = 0, second = 1, Newvalue;  cout << " Enter the Digit " << '\n';  cin >> value1;  cout << " Fibnacci Series " << '\n';  for (int i = 0; i < value1; i++)  {  cout << first << '\n'; //0    Newvalue = first + second; // 0 + 1 = 1  first = second; // 1  second = Newvalue; // 1  }    return 0;  } |
| Output: |

**5. Write a C++ program to make the following pattern, where height of the pattern is input by the user. Hint: Use Nested for loop**

| Solution |
| --- |
| Paste your code here:  #include <iostream>  using namespace std;  int main() {  int a;  a = 5;  for (int i = a; i >= 1; i--) {  for (int j = 1; j <= i; j++) {  cout << "\*";  }  cout << '\n';  }  return 0;  } |
| Output: |

**Home Tasks:**

**1. Write a C++ Program to check whether a given number is a power of two or not.**

| Solution |
| --- |
| Paste your code here: |
| Output: |

**2. Write a program in C++ which prints the numbers from 1 to 150 except the multiples of 10. Make use of continue statement.**

| Solution |
| --- |
| Paste your code here: |
| Output: |

**3. Write a C++ program to find sum of digits of a number. Sum of digits means add all the digits of any number, for example we take any number like 358. Its sum of all digit is 3+5+8=16 (WHILE LOOP)**

| Solution |
| --- |
| Paste your code here: |
| Output: |

**4. Write a program in C++ to check whether a number is prime or not.**

| Solution |
| --- |
| Paste your code here: |
| Output: |

**5. Write a C++ program to print full pyramid using \* where the height of pyramid is input by user using for loop. Example of full pyramid:.**

| Solution |
| --- |
| Paste your code here: |
| Output: |