Assignment of c++ programming

Range of assignment 1-15 programs

1. Program that display the first 10 natural numbers:

#include<iostream>

using namespace std;

int main()

{

for(int i = 1; i<=10; i++)

{

cout<<i;

}

cout<<endl;

return 0;

}

1. Program that display the first 10 natural number and their sums:

#include<iostream>

using namespace std;

int main()

{

cout<<"The First 10 Natural Number : ";

int j, sum = 0;

for(j = 1; j <= 10; j++)

{

sum = sum +j;

cout<<j;

}

cout<<" The Sum Is : "<<sum<<endl;

}

1. Program that display the entered natural number and their sums

#include<iostream>

using namespace std;

int main()

{

int i, n, sum=0;

cout<<"Input Value Of Terms : ";

cin>>n;

cout<<"The First Natural Number Is : "<<n<<endl;

for(i = 1; i <= n; i++)

{

cout<<i;

sum+=i;

}

cout<<" The Sum Of Natural Numbers Up To Terms : "<<sum<<endl;

}

1. Program that display sum of 10 natural number and their average

#include<iostream>

using namespace std;

int main()

{

int i, n, sum=0;

float avg;

cout<<"Input The 10 Numbers :"<<endl;

for(i = 1; i <= 10; i++)

{

cout<<"Number - "<<i<< ":";

cin>>n;

sum+=n;

}

avg=sum/10.0;

cout<<" The Sum oF 10 No Is : "<<sum<<" The Average Is : "<<avg;

}

1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5. int i, ctr, cub;
6. cout << "\n\n Display the cube of the numbers upto a given integer:\n";
7. cout << "----------------------------------------------------------\n";
8. cout << "Input the number of terms : ";
9. cin >> ctr;
10. for (i = 1; i <= ctr; i++)
11. {
12. cub = i \* i \* i;
13. cout << "Number is : " << i << " and the cube of " << i << " is: " << cub << endl;
14. }
15. }
16. Program that display multiplication of 15x1-15x10:

#include<iostream>

using namespace std;

int main()

{

int x = 15;

int Multi = 0;

for(int y = 1; y <= 10; y++)

{

Multi = x\*y;

cout<<x<<" x "<<y<<" = " <<Multi<<endl;

}

}

1. Program that display multiplication from1 to n data:

#include<iostream>

using namespace std;

int main()

{

int j;

int i;

int n;

int Multi = 0;

cout<<"Input Up To The Table Number Starting From 1 : ";

cin>>n;

cout<<"Multiplication Table From 1 Up To "<<n;

for(i = 1; i <= 10; i++)

{

for(j = 1; j <= n; j++)

{

if(j<=n+1)

Multi = i\*j;

cout<<" "<<i<<" x "<<j<<" = " <<Multi<<endl;

}

cout<<endl;

}

}

1. Program that display odd number and their sum:

#include<iostream>

using namespace std;

int main()

{

int i;

int n;

int sum = 0;

cout<<"Input Number Of Term : ";

cin>>n;

cout<<"\nThe Odd Numbers Are : ";

for(i = 1; i <= n; i++)

{

cout<<2\*i-1;

sum+= 2\*i-1;

}

cout<<" \nThe Sum Of Odd Natural Number Up To Terms: " <<sum<<endl;

}

1. Program that display pattern like right angle triangle:

#include<iostream>

using namespace std;

int main()

{

int i;

int j;

int m = 0;

cout<<"Input Number Of Rows : ";

cin>>m;

for(i = 1; i <= m; i++)

{

for(j = 1; j <= i; j++)

cout<<"\*";

cout<<endl;

}

}

1. Program that display right angle with a number:

#include<iostream>

using namespace std;

int main()

{

int i;

int x;

int m;

cout<<"Input Number Of The Rows : ";

cin>>m;

for(i = 1; i <= m; i++)

{

for(x = 1; x <= i; x++)

cout<<x;

cout<<endl;

}

1. Program that display right angle which repeats the row number:

#include<iostream>

using namespace std;

int main()

{

int i;

int x;

int m;

cout<<"Input Number Of The Rows : ";

cin>>m;

for(i = 1; i <= m; i++)

{

for(x = 1; x <= i; x++)

cout<<i;

cout<<endl;

}

}

1. Program that display right angle which increased by1:

#include<iostream>

using namespace std;

int main()

{

int i;

int x;

int m;

int k = 1;

cout<<"Input Number Of The Rows : ";

cin>>m;

for(i = 1; i <= m; i++)

{

for(x = 1; x <= i; x++)

cout<<k++;

cout<<endl;

}

}

1. Program that display such pattern like pyramid which increased by 1:

#include<iostream>

using namespace std;

int main()

{

int i;

int x;

int m;

int k;

int t = 1;

int y;

cout<<"Input Number Of The Rows : ";

cin>>m;

y = m + 9 - 6;

for(i = 1; i <= m; i++)

{

for(k = y; k >= 1; k--)

{

cout<<" ";

}

for(x = 1; x <= i; x++)

cout<<t++;

cout<<endl;

y--;

}

}

1. Program that display pattern like pyramid which asterisk :

#include <iostream>

using namespace std;

int main()

{

int rows;

cout << "Enter number of rows: ";

cin >> rows;

for(int i = rows; i >= 1; --i)

{

for(int j = 1; j <= i; ++j)

{

cout << j << " ";

}

cout << endl;

}

return 0;

}

1. Program that tests the factorial of given numbers:

#include<iostream>

using namespace std;

int main()

{

int i;

int f = 1;

int num;

cout<<"Input The Number : ";

cin>>num;

for(i = 1; i <= num; i++)

f = f\*i;

{

cout<<"The Factorial Of The Number Is : "<<num<<" ! " << " = "<<f<<endl;

}

}