Q1\ Write a C++ program to read and printout the vector $B\_{m}$, then find all primes with indexes.

Q2\ Write a C++ program to read and printout the matrix $A\_{nxn}$, then

a) Find maximum element of second diagonal.
b) Swap first row with last row.
c) If I is an odd, then find average of all element $a\_{iJ}$ of $A\_{nxn}$.

Q3\ Write a C++ program to read and printout the least of students with its grades, then sort grades with names.

Q4\ Write a C++ program to read and printout the matrix $A\_{mxm}$, then find average of elements in last row and second diagonal.

Q5\ Write a C++ program to read and printout the matrix $A\_{mxm}$, then find the factorial of maximum element.

**What is the output of the following programs**

Q6\

#include <iostream>
using namespace std;
int main()
{
int  i, j, n;
cout << "Enter number of rows:  ";
cin >> n;
for(i = 1; i <= n; i++)
{
for(j = 1; j <= i; j++)
{
cout << "\* ";
}
//Ending line after each row
cout << "\n";
}
return 0;
}

Q7\

#include <iostream>
using namespace std;
int main()
{
int  i, j, n;
cout << "Enter number of rows:  ";
cin >> n;
for(i = n; i >= 1; i--)
{
for(j = 1; j <= i; j++)
{
cout << "\* ";
}
// ending line after each row
cout << "\n";
}
return 0;
}

Q8\

 #include<iostream>
using namespace std;
int main()
{
int n, s, i, j;
cout << "Enter number of rows: ";
cin >> n;
for(i = 1; i <= n; i++)
{
//for loop for displaying space or (s = i; s < n; s++)
{
cout << " ";
}
//for loop to display star equal to row number
for(j = 1; j <= (2 \* i - 1); j++)
{
cout << "\*";
}
// ending line after each row
cout << "\n";
}
}

Q9\

#include<iostream>
using namespace std;
int main()
{
int n, s, i, j;
cout << "Enter number of rows: ";
cin >> n;
for(i = n; i >= 1; i--)
{
//for loop to put space
for(s = i; s < n; s++)
cout << " ";
//for loop for displaying star
for(j = 1; j <= (2 \* i - 1); j++)
cout << "\* ";
// ending line after each row
cout << "\n";
}
return 0;
}

Q10\

#include<iostream>
using namespace std;
int main()
{
int n, s, i, j;
cout << "Enter number of rows: ";
cin >> n;
for(i = n; i >= 1; i--)
{
//for loop to put space
for(s = i; s < n; s++)
cout << " ";
//for loop for displaying star
for(j = 1; j <= i; j++)
cout << "\* ";
// ending line after each row
cout << "\n";
}
return 0;
}

Q11\ Write a program in C++ to print a welcome text in a separate line

Q12\ Write a program in C++ to print the sum of two numbers

Q13\ Write a program in C++ to print the sum of two numbers using variables.  .

Q14\ Write a program in C++ to display the operation of pre and post increment and decrement.

Q15\ Write a program in C++ to print the result of the specified operations.

Q16\ Write a program in C++ to add two numbers accept through keyboard.

Q17\ Write a program in C++ to swap two numbers.

Q18\ Write a program in C++ to calculate the volume of a sphere.

Q19\ Write a program in C++ to calculate the volume of a cube.

Q20\ Write a program in C++ to calculate the volume of a cylinder

Q21\ Write a program in C++ to find the Area and Perimeter of a Rectangle.

Q22\ Write a program in C++ to find the area of triangle.

Q23\ Write a program in C++ to find the area and circumference of a circle.

Q24\ Write a program in C++ to convert temperature in Celsius to Fahrenheit.

Q25\ Write a program in C++ to convert temperature in Fahrenheit to Celsius.

Q26\ Write a program in C++ to find the third angle of a triangle.

Q27\ Write a program in C++ that converts kilometers per hour to miles per hour.

Q28\ Write a program in C++ to convert temperature in Kelvin to Fahrenheit.

Q29\ Write a program in C++ to convert temperature in Kelvin to Celsius.

Q30\ Write a program in C++ to convert temperature in Fahrenheit to Kelvin.

Q31\ Write a program in C++ to convert temperature in Celsius to Kelvin.

Q32\ Write a program in C++ to find the area of Scalene Triangle.

Q33\ Write a program in C++ to compute quotient and remainder

Q34\ Write a program in C++ to compute the total and average of four numbers.