QUESTION NO 1:

#include <iostream.h>

#include<iomanip>

using namespace std;

int main()

{

int i;

cout << "- - - - - - - - - " << endl;

cout << "a b" << endl;

cout << "- - - - - - - - - " << endl;

i = 0;

while (i < 5)

{

cout << i + 1 << setw(9) << 5 - i << endl;

i++;

}

cout << "- - - - - - - - - -" << endl;

return 0;

}

QUESTION NO 2:

#include <iostream.h>

#include<conio.h>

using namespace std;

int main(){

int num = 1, x = 0;

cout << "----------"<<endl;

cout << "num\tsum"<<endl;

cout << "---------"<<endl;

while (num <= 5)

{

x = x + num;

cout << num << "\t" << x <<endl;

num++;

}

cout << "----------";

return 0;

}

QUESTION NO 3:

#include <iostream.h>

using namespace std;

int main(){

float a, r;

a = 4.0;

r = 1.0;

do

{

r = r + 1.0 / a;

a = a + 4;

} while (a <= 100);

cout << "the answer is : " << r;

return 0;

}

QUESTION NO 4:

#include <iostream.h>

using namespace std;

int main()

{

char ch;

cout << "Here is your result : ";

for (ch = 'A'; ch <= 'Z'; ch++)

cout<< ch;

}

QUESTION NO 5:

#include <iostream.h>

using namespace std;

int main()

{

int biggest, smallest, number;

int n;

float total;

cout << "How many numbers do you want to comapre: ";

cin >> n;

cout << "Please input the number : ";

cin >> number;

biggest = smallest = total = number;

for (int j = 0; j <= n - 2; ++j)

{

cout << "Please enter a whole number: ";

cin >> number;

total = total + number;

if (number > biggest)

biggest = number;

if (number < smallest)

smallest = number;

}

cout<<"------------------------------" << endl;

cout << "The biggest number is: " << biggest << endl;

cout << "The smallest number is: " << smallest << endl;

cout << "The average of entered "<< n<<" number is : " << total / n << endl;

}

QUESTION NO 6:

#include <iostream.h>

using namespace std;

int main()

{

int n = 1, num;

int choice1 = 0, choice2 = 0, choice3 = 0, choice4 = 0;

cout << "What is my name :\n" << endl;

cout<<"1.Aiza 2.Haiqa 3.Aliyar 4.Zainab";

while (n <= 20)

{

cout << endl;

cout << "Enter your answer :";

cin >> num;

if (num == 1)

choice1++;

if (num == 2)

choice2++;

if (num == 3)

choice3++;

if (num == 4)

choice4++;

n++;

}

cout << "The answer 1 is selected " << choice1 << " times."<<endl;

cout << "The answer 2 is selected " << choice2 << " times."<<endl;

cout << "The answer 3 is selected " << choice3 << " times."<<endl;

cout << "The answer 4 is selected " << choice4 << " times."<<endl;

return 0;

}

QUESTION NO 7:

#include <iostream.h>

using namespace std;

int main()

{

int num, minimum;

cout << "Input the number : ";

cin >> num;

minimum = num;

for (int n = 1; n <= 19; n++)

{

cout << endl << "Inputt the number : ";

cin >> num;

if ( minimum > num)

minimum = num;

}

cout << endl << "The minimum number is:" << minimum;

return 0;

}

QUESTION NO 8:

#include <iostream.h>

using namespace std;

int main() {

int n, n = 0, y = 1, x = 0;

cout << "How much is the length of series : ";

cin >> n;

cout << "Fibonacci Series is : ";

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

if (i == 1) {

cout << n << ", ";

continue;

}

if (i == 2) {

cout << y << ", ";

continue;

}

x = n + y;

n = y;

y = x;

cout << x << ", ";

}

return 0;

}

QUESTION NO 10:

#include <iostream.h>

using namespace std;

int main()

{

int i, x, num = 1, sum;

cout << "Enter the number till which you have to find perfect numbers : ";

cin >> x;

while ( x >= num)

{

sum = 0;

int i = 1;

while ( i < num)

{

if (num % i == 0)

sum = sum + i;

i++;

}

if (sum != num)

cout << endl << num << " is not a perfect number.";

else

cout << endl << num << " is a perfect number.";

num++;

}

return 0;

}

QUESTION NO 13:

#include <iostream.h>

using namespace std;

int main()

{

int c, n, p;

cout << "Input a Number upto which prime numbers are required:";

cin >> n;

int num = 2;

while (num < n)

{

p = 1;

for (c = 2; c <= num / 2; c++)

if (num % c == 0)

{

p = 0;

break;

}

if (p == 1)

cout << num << " , ";

num++;

}

return 0;

}

QUESTION NO 14:

#include <iostream.h>

using namespace std;

int main()

{

long int n, x, f, num;

cout << "Press 1 to perform factorial and 0 to quit : ";

cin >> num;

while (num == 1) {

cout << "---------------" << endl;

cout <<"Enter a number : ";

cin >> n;

x = f = 1;

while (x <= n)

{

f = f \* x;

x++;

}

cout << "Factorial of " << n << " is : " << f;

cout << endl << "if you want to perfrom another factorial calulation press 1 and press 0 to quit : ";

cin >> num;

}

return 0;

}

QUESTION NO 15:

#include <iostream.h>

using namespace std;

int main() {

int i, j;

bool prime = 1;

cout << "Input positive number : ";

cin >> j;

if (j == 1 || j == 0) {

prime = 0;

}

for (i = 2; i <= j / 2; ++i) {

if (j % i == 0) {

prime = 0;

break;

}

}

if (!prime)

cout << j << " is not a prime number";

else

cout << j << " is a prime number";

return 0;

}

QUESTION NO 16:

#include <iostream.h>

#include<conio.h>

using namespace std;

int main()

{

int highest, marks, highestsec;

cout << "Enter a positive number and press 0 to exit : ";

cin >> marks;

if (marks > 0)

{

highestsec = highest = marks;

while (marks > 0) {

if (marks > highest)

{

highestsec = highest;

highest = marks;

}

cout << "Enter a positive number and press 0 to exit : ";

cin >> marks;

}

cout << "The 2nd highest number is : " << highestsec;

}

return 0;

}

QUESTION NO 17:

#include<iostream.h>

#include<conio.h>

using namespace std;

int main()

{

int n, num, count=1, positive = 0, negative = 0;

cout << "How Many numbers do you want to check :";

cin >> n;

while (count <= n)

{

cout << "Input number : ";

cin >> num;

if (num <= 0)

negative++;

else

positive++;

count++;

}

cout << endl;

cout << " The Total number Of Positive integers are : " << positive << endl;

cout << " The Total number Of negative integers are : " << negative <<endl;

return 0;

}

QUESTION NO 20:

#include<iostream.h>

#include<conio.h>

using namespace std;

int main()

{

float num1, num2, x = 0;

for (num1 = 1, num2 = 2; num2 <= 100; num1++, num2++)

{

x = x + (num1 / num2);

}

cout << "The Sum of the series is : " << x;

}

QUESTION NO 22:

#include<iostream.h>

using namespace std;

int main()

{

int a = 1;

while (a <= 200)

{

cout << a << " ";

a = a \* 3;

}

cout << "200";

}

QUESTION NO 28:

#include <iostream.h>

using namespace std;

int main() {

int n, i=1;

cout << "Enter a positive number: ";

cin >> n;

cout << "Factors of number (" << n << ") are: ";

cout << "1 ";

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

if (n % i == 0)

cout << i << " ";

}

return 0;

}

QUESTION NO 29:

#include<iostream.h>

using namespace std;

int main(){

int n1, n2=1, n3, sum = 0;

cout << "Enter the values to be summed after this:";

cin >> n1;

while (n2 <= n1) {

cout << "Enter A number:";

cin >> n3;

sum = sum + n3;

n2++;

}

cout << "The sum of the subsequent enteries after the first integer entered is :" << sum << endl;

return 0;

}

QUESTION NO 31:

#include <iostream.h>

using namespace std;

int main(){

int n, num, sum, c=1;

sum = 0;

num = 1;

cout << "How Many odd numbers are to be added : ";

cin >> n;

while (c <= n) {

sum = sum + num;

num = num + 2;

c++;

}

cout << "Sum of the first (" << n << ") odd numbers is : " << sum;

}

QUESTION NO 33:

#include<iostream.h>

using namespace std;

int main() {

int num, count = 0;

cout << "Input a number : ";

cin >> num;

while (num < 0) {

cout << "Enter only positive number : ";

cin >> num;

}

do {

num = num / 10;

count++;

} while (num > 0);

cout << "Number of digits in a number is " << count;

return 0;

}

QUESTION NO 39:

#include<iostream>

using namespace std;

int main()

{

int i, j, k,l;

for (i = 1; i <= 4; i++) {

for (j = 1; j <= 4; j++) {

for (k = 1; k <= 4; k++) {

for (l = 1; l <= 4; l++) {

if (i != j && i != k && j != k && i != l && l != k&& l!=j) {

cout << i << j << k << l << endl;

}

}

}

}

}

return 0;

}

QUESTION NO 40:

#include<iostream.h>

using namespace std;

int main(){

int c, num, num1, x;

cout << "Enter starting number:";

cin >> num1;

cout << "Enter a number upto which you want to calculate prime numbers :";

cin >> num;

while (num > num1){

x = 1;

for (c = 2; c < num; c++)

if (num % c == 0){

x = 0;

break;

}

if ( (num % 10 == 7) && x == 1 )

cout << endl << num << " Is a prime number that ends with the digit 7";

num--;

}

return 0;

}

QUESTION NO 41:

#include<iostream.h>

using namespace std;

int main()

{

int c, p, a, num, rev, num1=101;

cout << "THE PRIME AND ALSO PALINDROME NUMBERS BETWEEN 100-500 ARE : " << endl;

while (num1 < 500)

{

p = 1;

c = 2;

while(c < num1)

{

if (num1 % c == 0)

{

p = 0;

break;

}

c++;

}

num = num1;

rev = 0;

while (num != 0)

{

a = num % 10;

rev = (rev \* 10) + a;

num = num / 10;

}

if (p == 1 && (num1 == rev))

cout<<"(" << num1 << ") is a prime number and also a palindrome number" << endl;

num1++;

}

}

QUESTION NO 45:

#include <iostream.h>

using namespace std;

int main(){

float calories = 3.9, total;

int minutes=10;

while (minutes <= 30){

total = calories \* minutes;

cout << "After " << minutes << " minutes have passed you will have (" << total << ") calories burned." << endl;

minutes = minutes + 5;

}

return 0;

}

QUESTION NO 46:

#include<iostream.h>

using namespace std;

int main() {

int num, count = 0;

cout << "Enter number : ";

cin >> num;

while (num != -1) {

cout << "Enter number : ";

cin >> num;

if (num > 60) {

count++;

}

}

cout<<"The total number of numbers that are greater than 60 are : " << count + 1;

return 0;

}

QUESTION NO 47:

#include<iostream.h>

using namespace std;

int main()

{

int positive = 0, negative = 0, zero = 0, i, n,num;

cout << "How Many Numbers Do You Want To Enter : ";

cin >> num;

for (i = 0; i < num; i++)

{

cin >> n;

if (n > 0)

positive++;

else if (n == 0)

zero++;

else

negative++;

}

cout << "Frequency of Positivee Numbers is : (" << positive <<")" << endl;

cout << "Frequency of Zero is : (" << zero <<")" << endl;

cout << "Frequency of Negative Numbers is : (" << negative <<")";

cout << endl;

return 0;

}

QUESTION NO 48:

#include <iostream.h>

using namespace std;

int main(){

int n;

cout << "Enter the size : ";

cin >> n;

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

{

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

if ((j == n || j == 1) || (i == n || i == 1))

cout << "\*";

else

cout << " ";

}

cout << endl;

}

return 0;

}

QUESTION NO 50:

#include <iostream.h>

using namespace std;

int main(){

for (int i = 5; i >= 1; i--){

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

{

cout << j<<" ";

}

cout << endl;

}

return 0;

}

QUESTION NO 52:

#include <iostream.h>

using namespace std;

int main(){

for (int i = 1; i <= 5; i++){

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

cout << j<<" ";

}

cout << endl;

}

return 0;

}

QUESTION NO 53:

#include <iostream.h>

using namespace std;

int main(){

int n = 5;

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

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

cout << (i \* j) << " ";

}

cout << endl;

}

return 0;

}

QUESTION NO 56:

#include <iostream.h>

using namespace std;

int main() {

int p\_height = 5;

int max\_stars = p\_height \* 2 - 1;

int p\_space = p\_height - 1;

int i, j, k;

for (int i = p\_height; i >= 1; i--) {

for (int j = p\_space; j >= i; j--) {

cout << " ";

}

for (int k = 1; k <= max\_stars; k++) {

cout << "B";

}

max\_stars -= 2;

cout << endl;

}

return 0;

}

QUESTION NO 57:

#include <iostream.h>

using namespace std;

int main() {

int x;

cout << "Enter height : " << endl;

cin >> x;

int y = x \* 2 - 1;

int z = x - 1;

int i, j, k;

for (int i = x; i >= 1; i--) {

for (int j = z; j >= i; j--) {

cout << " ";

}

for (int k = 1; k <= y; k++) {

cout << "&"<<" ";

}

y -= 2;

cout << endl;

}

return 0;

}

QUESTION NO 58:

#include <iostream.h>

using namespace std;

int main()

{

int n1, n, n2, c, d;

cout << "Enter an odd number" << endl;

cin >> n1;

n = n1 / 2 + 1;

for (n2 = 1; n2 <= n1; n2++)

{

for (c = 1; c <= n1; c++)

{

if (c == n || c == n1 - n + 1)

{

cout << "\*";

}

else

{

cout << " ";

}

}

if (n2 <= n1 / 2)

n--;

else

n++;

cout << endl;

}

}

QUESTION NO 60:

#include <iostream.h>

using namespace std;

int main(){

char i, j;

for (int i = 'A'; i <= 'E'; i++){

for (int j = 'A'; j <= i; j++){

cout << char(j)<<" ";

} cout << endl;

}

return 0;

}

QUESTION NO 62:

#include <iostream.h>

using namespace std;

int main(){

int n;

cout << "Enter size : ";

cin >> n;

int x = n, y = n;

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

for (int j = 1; j < n \* 2; j++){

if (j <= x){

cout << j << " ";

}

else if (j >= y)

{

cout << (n \* 2 - j) << " ";

}

else

{

cout << " ";

}

}

cout << endl;

x--;

y++;

}

return 0;

}

QUESTION NO 64:

#include<iostream.h>

using namespace std;

int main()

{

int i = 0;

while ( i <= 5)

{

for (int k = 0; k <= i; k++)

{

cout << k;

}

cout << "\n";

i++;

}

}

QUESTION NO 67:

#include <iostream>

using namespace std;

int main()

{

int n;

cout << "Enter the value of n \n";

cin >> n;

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

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

{

if (j == i || j == (n + 1 - i))

cout << j;

else

cout << " ";

}

cout << endl;

}

return 0;

}

QUESTION NO 77:

#include <iostream.h>

using namespace std;

int main()

{

int i=1, j, rows;

cout << "Enter number of rows : ";

cin >> rows;

while (i <= rows) {

int j = 1;

while(j <= i) {

if (j == 1 || j == i || i == rows) {

cout << "\*";

}

else {

cout << " ";

}

j++;

}

cout <<endl;

i++;

}

return 0;

}

QUESTION NO 78:

#include <iostream.h>

using namespace std;

int main()

{

int i=1, j, rows;

cout<<"Enter number of rows : ";

cin >> rows;

while (i <= rows) {

for (j = 1; j <= rows - i; j++){

cout << " ";

}

int j = 1;

while(j <= rows) {

if (i == rows || i == 1 || j == rows || j == 1)

cout << "\*";

else

cout << " ";

j++;

}

cout << endl;

i++;

}

return 0;

}