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**PF\_LAB Task**

**Question#1**

#include <iostream>

using namespace std;

int main() {

int count = 1;

while (count <= 300) {

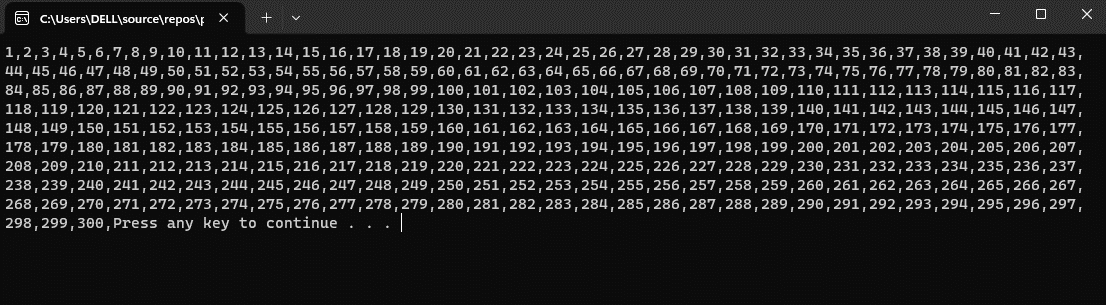
cout << count << ",";

count = count + 1;

}

system("pause");

}



**Question#2**

#include <iostream>

using namespace std;

int main() {

int count = 1;

while (count <= 500) {

if (count % 2 != 0) {

cout << count << ",";

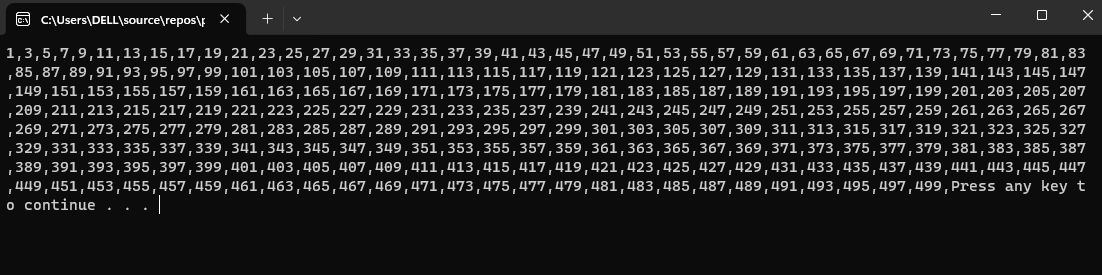
}

count = count + 1;

}

system("pause");

}

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**Question#3**

#include <iostream>

using namespace std;

int main() {

int n, count = 0,even=2;

cout << "Enter Range : "; cin >> n;

while (count < n) {

cout << even << " ";

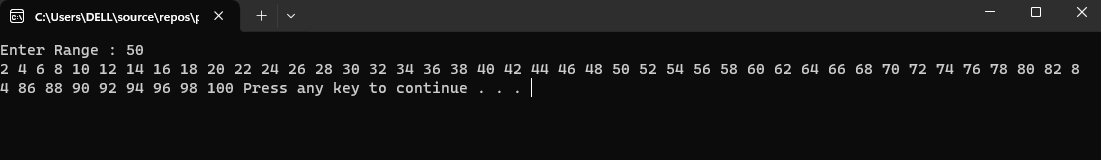
even = even + 2;

count = count + 1;

}

system("pause");

}

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**Question#4**

#include <iostream>

using namespace std;

int main() {

int start,n ,count = 0;

cout << "Enter Range "<<endl;

cout << "Enter Starting Number : "; cin >> start;

cout << "Enter Ending Number : "; cin >> n;

cout << "Even Number : "<< endl;

while (count < n) {

start = start + 1;

if (start % 2 == 0) {

cout << start << " ";

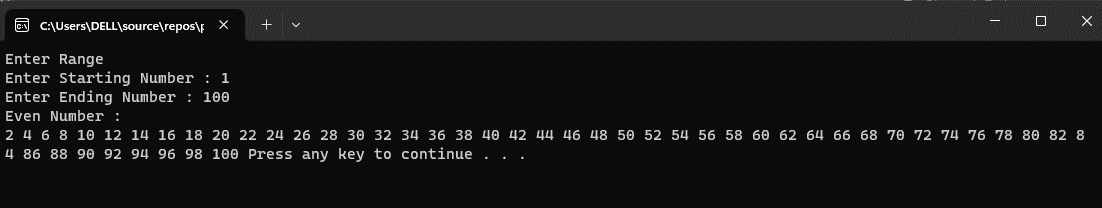
}

count = count + 1;

}

system("pause");

}



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**Question#5**

#include <iostream>

using namespace std;

int main() {

int num, val = 0, count = 3;

cout << "Enter a Positive Integer : "; cin >> num;

if (num <= 0) {

cout << "Invalid Input";

}

else if (num == 1) { cout << "Invalid Input"; }

else if (num == 2) { cout << "Prime"; }

else if (num == 3) { cout << "Prime"; }

else {

while (count < num / 2) {

if (num % count == 0) {

val = val + 1;

break;

}

count = count + 1;

}

if (val == 0) {

cout << "Prime";

}

else { cout << "Not Prime"; }

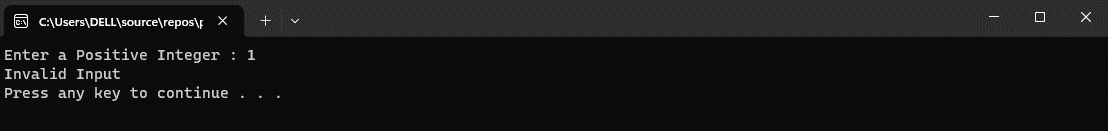
}

cout << endl;

system("pause");

}

****





**Question#6**

#include <iostream>

using namespace std;

int main() {

int start,end,count=0;

cout << "Enter Starting Number :"; cin >> start;

cout << "Enter Ending Number :"; cin >> end;

count = start;

while (count < end) {

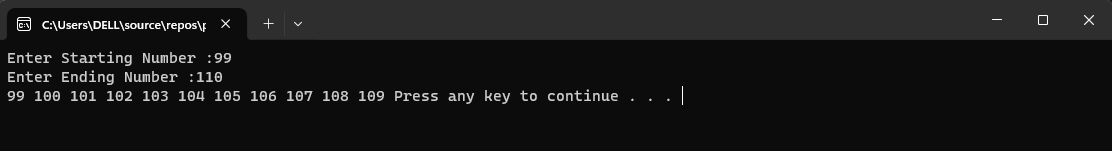
cout << count << " ";

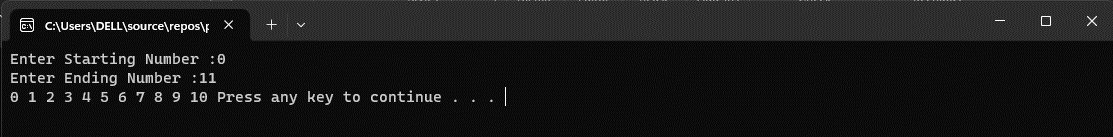
count = count + 1;

}

system("pause");

}

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**Question#7**

#include <iostream>

using namespace std;

int main() {

int start, n, count = 0,even=0;

cout << "Enter Starting Number : "; cin >> start;

cout << "Enter No of Terms :"; cin >> n;

while (count<= n) {

if (start % 2 == 0) {

even = start;

cout << even << " ";

}

start = start + 1;

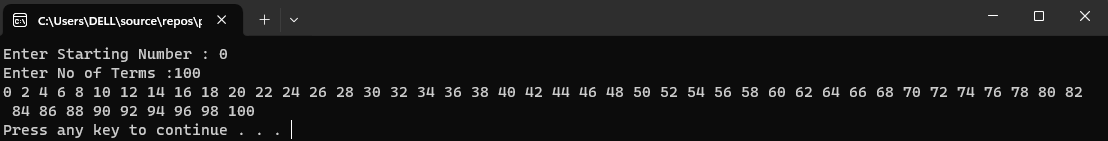
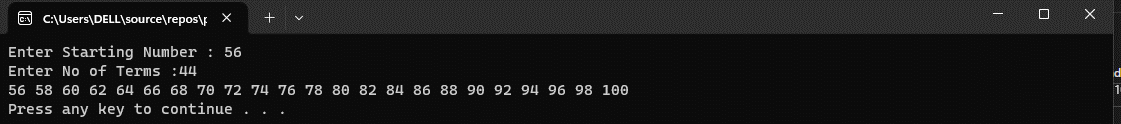
count = count + 1;

}

cout << endl;

system("pause");

}

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**Question#8**

#include <iostream>

using namespace std;

int main() {

int n, count = 1,sum=0;

cout << "Enter Range :"; cin >> n;

while (count <= n) {

sum = count + sum;

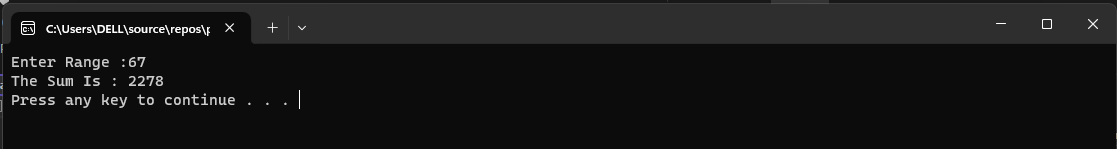
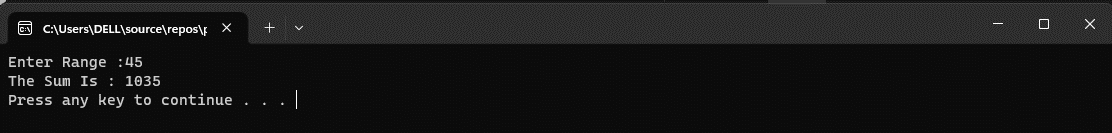
count = count + 1;

}

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

system("pause");

}

****

**Question#9**

#include <iostream>

using namespace std;

int main() {

int n, count = 1;

cout << "Enter Number :"; cin >> n;

while (count <= 10) {

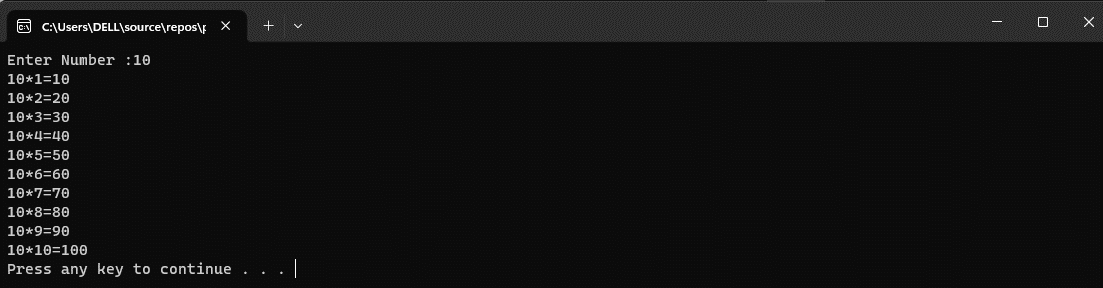
cout << n << "\*" << count << "=" << n \* count << endl;

count = count + 1;

}

system("pause");

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Description automatically generated**

**Question#10**

#include <iostream>

using namespace std;

int main() {

int n, count = 1,factorial=1;

cout << "Enter Number :"; cin >> n;

if (n < 0) {

cout << "Invalid Input";

}

else {

while (count <= n) {

factorial = factorial \* count;

count = count + 1;

}

cout << "Factorial = " << factorial<<endl;

}

system("pause");

}

****

**Question#11**

#include <iostream>

using namespace std;

int main() {

int exp, base, count = 1,result=1;

cout << "Enter Exponential Power :"; cin >> exp;

cout << "Enter Base : "; cin >> base;

while (count <= exp) {

result = result \* base;

count = count + 1;

}

cout << base<<"^"<<exp<<"="<<result << endl;

system("pause");

}****

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**Question#12**

#include <iostream>

using namespace std;

int main() {

int n,count = 1,sum=0,square=0;

cout << "Enter Range : "; cin >> n;

if (n < 0) {

cout << "Invalid Input";

}

else {

while (count <= n) {

square = count \* count;

sum = sum + square;

count = count + 1;

}

cout << "Sum of Squares =" << sum << endl;

}

system("pause");

}



**Question#13**

#include <iostream>

using namespace std;

int main() {

int X, Y;

cout << "Enter x-coordinate :"; cin >> X;

cout << "Enter y-coordinate :"; cin >> Y;

if (X > 0) {

if (Y > 0) {

cout << "1st Quadrant";

}

}

if (X < 0) {

if (Y > 0) {

cout << "2nd Quadrant";

}

}

if (X < 0) {

if (Y < 0) {

cout << "3rd Quadrant";

}

}

if (X > 0) {

if (Y < 0) {

cout << "4rth Quadrant";

}

}

cout << endl;

system("pause");

}



**Question#14**

**Question#15**

#include <iostream>

using namespace std;

int main() {

int side1,side2,side3;

cout << "Enter Side 1 :"; cin >> side1;

cout << "Enter Side 2 :"; cin >> side2;

cout << "Enter Side 3 :"; cin >> side3;

if (side1 == side2) {

if (side2 == side3) {

cout << "Equilateral Triangle";

}

else {

cout << "Isosceles Triangle";

}

}

else if (side2==side3){

cout << "Isosceles Triangle";

}

else if (side1 == side3) {

cout << "Isosceles Triangle";

}

else {

cout << "Scalene Triangle";

}

cout << endl;

system("pause");

}



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**Question#16**

#include <iostream>

using namespace std;

int main() {

int n;

cout << "Enter 1 for Red"<<endl;

cout << "Enter 2 for Yellow"<<endl;

cout << "Enter 3 for Green"<<endl;

cout << "Enter Current Color :"; cin >> n;

if (n == 1) {

cout << "Next Color is Yellow";

}

if (n == 2) {

cout << "Next Color is Green";

}

if (n == 3) {

cout << "Next Color is Red";

}

cout << endl;

system("pause"); A black screen with a black border

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**Question#17**

#include <iostream>

using namespace std;

int main() {

int num,digits=0;

cout << "Enter A Number :"; cin >> num;

while (num > 0) {

num = num / 10;

digits = digits + 1;

}

cout << "Number of Digits =" << digits<<endl;

system("pause");

}





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