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**Section C**

**Lab manual 7(Lab Tasks)**

**Q#1**

#include<iostream>

using namespace std;

int main(){

int n[10];

for(int i = 0; i < 10; i++) {

cout << "Enter number " << (i+1) << ": ";

cin >> n[i];

}

cout << "The numbers you entered are: ";

for(int i = 0; i < 10; i++) {

cout << n[i] << " ";

}

return 0;

}

**Q#2**

#include<iostream>

using namespace std;

int main() {

int n[5];

int s = 0;

int p = 1;

for(int i = 0; i < 5; i++) {

cout << "Enter number " << (i+1) << ": ";

cin >> n[i];

}

for(int i = 0; i < 5; i++) {

s += n[i];

p \*= n[i];

}

cout << "The sum of the numbers is: " << s << endl;

cout << "The product of the numbers is: " << p << endl;

return 0;

}

**Q#3**

#include<iostream>

using namespace std;

int main() {

int n, i, j, k = 0;

cout << "Enter the number of rows for the diamond pattern: ";

cin >> n;

int arr[2\*n-1][2\*n-1];

for(i = 0; i < n; i++) {

for(j = 0; j < 2\*n-1; j++) {

if(j >= n - i - 1 && j <= n + i - 1) {

arr[i][j] = 1;

arr[2\*(n-1)-i][j] = 1;

} else {

arr[i][j] = 0;

arr[2\*(n-1)-i][j] = 0;

}

}

}

for(i = 0; i < 2\*n-1; i++) {

for(j = 0; j < 2\*n-1; j++) {

if(arr[i][j] == 1) {

cout << "\*";

} else {

cout << " ";

}

}

cout << "\n";

}

return 0;

}