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**PF\_LAB Task**

**Question#1**

#include <iostream>

using namespace std;

int main() {

int choice, base10, rem = 0, count = 0;

cout << "Please Enter Your Number in base 10 : "; cin >> base10;

do {

cout << "Please Enter 2 to Convert to Base 2" << endl;

cout << "Press Enter 8 to Convert to Base 8" << endl;

cout << "Enter Your Choice : "; cin >> choice;

if (choice == 2 || choice == 8) {

if (choice == 2) {

while (base10 > 0) {

rem = base10 % 2;

base10 = base10 / 2;

cout << rem;

}

}

if (choice == 8) {

while (base10 > 0) {

rem = base10 % 8;

base10 = base10 / 8;

cout << rem ;

}

}

count = count + 1;

}

else {

cout << "Incorrect Input, Please Enter Again" << endl;

}

} while (count <= 0);

cout << endl;

system("pause");

}

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**Question#2**

#include <iostream>

using namespace std;

int main() {

int num, streak = 1, count = 1,max=0;

cout << "Please enter numbers, enter -1 to stop : ";

cin >> num;

max = num;

if (num >0) {

do

{

cin >> num;

if (num > max) {

max = num;

streak = streak + 1;

}

} while (count > 0);

cout << "Output longest streak of non-decreasing numbers was " << streak << " numbers." << endl;

}

else

system("pause");

}

**Question#3**

#include <iostream>

using namespace std;

int main() {

int n,num,sum=0;

cout << "How Many Numbers You Want Enter : "; cin >> n;

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

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

if (num % 4 == 0) {

continue;

}

if (num % 2 == 0) {

sum = sum + num;

}

if (num % 2 != 0) {

break;

}

}

if (num % 2 != 0) {

cout << "an odd number was encountered hence the loop was terminated."<<endl;

}

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

system("pause");

}

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**Question#4**

#include <iostream>

using namespace std;

int main() {

int width,orignal=0,count=0;

cout << "Enter Witdh : "; cin >> width;

orignal = width;

int i = 0;

i = width;

for (; i >0; i--) {

cout << "\*";

count = count + 1;

if (i == 1) {

i = orignal - 1;

orignal = orignal - 1;

cout << endl;

}

}

system("pause");

}

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