

FOP LAB ASSIGNMENT 05

HOME TASK 05

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QUESTION NO 1:

```
using namespace std;

int main(){

    int a, b, hcf, lcm;

    cout<<"Enter two numbers : ";

    cin>>a;

    cin>>b;

    for (int i = 2; i <= a; ++i) {

        if ((a%i==0) and (b%i==0)){

            hcf=i;

        }

    }

    lcm=(a*b)/hcf;

    cout<<"LCM = "<<lcm;

    return 0;

}
```

RESULTS:

```
C:\Users\Dell\CLionProjects\untitled\cmake-build-debug\untitled.exe
Enter two numbers :12
14
LCM = 84
Process finished with exit code 0
|
```

QUESTION 02:

```
#include <iostream>

using namespace std;

int main(){

    int start, diff, x, result;

    cout<<"Enter initial term"<<endl;

    cin>>start;

    cout<<"Enter total terms"<<endl;

    cin>>x;

    cout<<"Enter the difference between terms"<<endl;

    cin>>diff;

    result=((x*(2*(start)+((x)-1)*(diff)))/2);

    cout<<"final sum = "<<result;

    return 0;

}
```

RESULTS :

```
C:\Users\Dell\CLionProjects\untitled\cmake-build-debug\untitled.exe
Enter initial term
7
Enter total terms
80
Enter the difference between terms
3
final sum = 10040
Process finished with exit code 0
```

QUESTION 03:

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {
```

```
    int a, binary = 0, i = 1, remainder;
```

```
    cout<<"Enter a 'decimal' number: ";
```

```
    cin>>a;
```

```
    while (a != 0) {
```

```
        remainder = a%2;
```

```
        binary = binary + remainder*i;
```

```
        a = a/2;
```

```
        i = i*10;
```

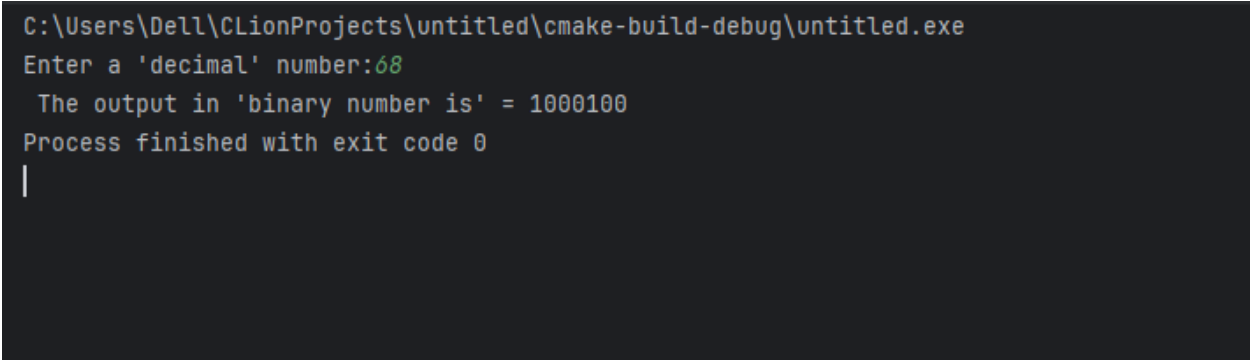
```
    }
```

```
cout<<"The output in 'binary number is' = "<<binary;

return 0;

}
```

RESULTS:



```
C:\Users\Dell\CLionProjects\untitled\cmake-build-debug\untitled.exe
Enter a 'decimal' number:68
The output in 'binary number is' = 1000100
Process finished with exit code 0
|
```

QUESTION 04:

```
#include <iostream>

using namespace std;

int main() {

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

        for(int j = 1; j <= 5 - i; j++)

            cout << " ";

        for(int k = 1; k <= 2*i - 1; k++)

            cout << "*";

        cout << endl;

    }
```

```
for(int i = 5-1; i >= 1; i--) {  
    for(int j = 1; j <= 5 - i; j++)  
        cout << " ";  
    for(int k = 1; k <= 2*i - 1; k++)  
        cout << "*";  
    cout << endl;  
}  
  
return 0;  
}
```

RESULTS:

```
C:\Users\Dell\CLionProjects\untitled\cmake-build-debug\untitled.exe  
  *  
 ***  
*****  
*****  
*****  
*****  
*****  
  *  
 ***  
  *  
  
Process finished with exit code 0
```