# Lab Manual 5 home task:

# Question 1:

```
1. #include <iostream>
2. using namespace std;
3. int main(){
         int x,y,i=2,hcf=1,a,b,LCM;
4.
         cout<<"Enter first larger number";</pre>
5.
6.
         cin>>x;
         cout<<"Enter second smaller number";</pre>
7.
8.
         cin>>y;
9.
         a=x;
10.
         b=y;
11.
         while(i<=b&&a!=1&&b!=1){
12.
                if(a\%i==0\&\&b\%i==0){
13.
                      hcf=hcf*i;
                      a=a/i;
14.
15.
                      b=b/i;
16.
                      i=2;
17.
                }
                else{
18.
19.
                      i++;
20.
                }
21.
22.
         LCM=a*b*hcf;
23.
24.
         cout<<"The LCM is"<<LCM;
25.}
```

```
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### Question 2:

```
1. #include <iostream>
2. using namespace std;
3. int main(){
         int x,d,n,t,sum(0);
4.
         cout<<"Enter the first number";
5.
6.
         cout<<"Enter the common difference";</pre>
7.
8.
         cin>>d;
9.
         cout<<"Enter the number of terms";
10.
         cin>>n;
11.
         for(t=1;t<=n;t++){
12.
                sum=sum+x;
13.
                x=x+d;
14.
15.
         cout<<sum;
16.}
```

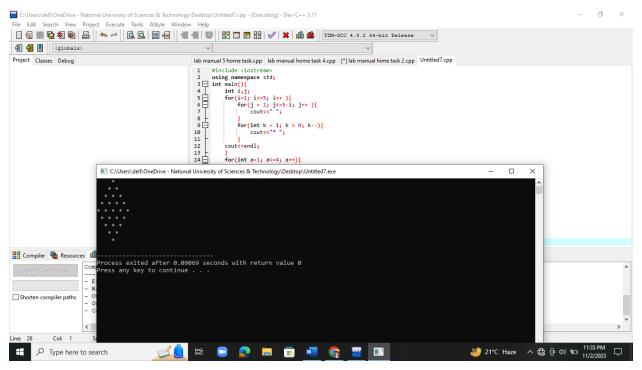
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```

### Question 3:

```
1. #include <iostream>
2. using namespace std;
3. int main(){
4.
          int i,j;
          for(i=1; i<=5; i++){
5.
                 for(j = 1; j < = 5-i; j + + ){
6.
                        cout<<" ";
7.
8.
                 for(int k = i; k > 0; k--){
9.
                        cout<<"* ";
10.
11.
12.
          cout<<endl;
13.
14.
          for(int a=1; a<=4; a++){
                 for(j=a; j>=1; j--){
15.
                        cout<<" ";
16.
17.
                 for(int k=0; k<=4-a; k++){
18.
```



#### Question 4:

```
1. #include <iostream>
```

```
2. using namespace std;
```

```
3. int main(){
```

```
4. int x,a=0,i=1;
```

- 5. cout<<"Enter a decimal number";
- 6. cin>>x;
- 7. while(x!=0){
- 8. a=a+(x%2)\*i;
- 9. x=x/2;
- 10. i=i\*10;

- **11**. }
- 12. cout<<a;
- 13.}

