

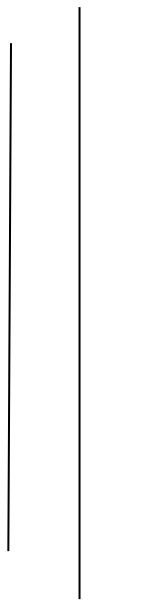


TRIBHUVAN UNIVERSITY

INSTITUTE OF ENGINEERING

PULCHOWK CAMPUS

DEPARTMENT OF ELECTRONICS AND COMPUTER ENGINEERING



LAB REPORT ON OBJECT ORIENTED PROGRAMMING

Bachelor's Degree in Electronics, Communication and Information Engineering
FIRST YEAR SECOND PART(I-II)

Name: Anju Chhetri

Roll Number: 076BEI005

LAB 5

TASK 1:

```
#include <iostream>
using namespace std;
template <class T>
T sum(T a, T b){
    return(a+b);
}
int main(){
    cout<<"Sum of two integers "<<sum(2,3);
    cout<<"\nSum of two float numbers "<<sum(2.34,3.34);
}
```

TASK 2:

```
#include <iostream>
using namespace std;

template<class t>
class temp{
    private:
        t l,b;
    public:
        temp(t a, t k){
            l=a;
            b=k;
        }
        t rectangle(){
            return(l*b);
        }
};

int main(){
    temp<int> obj(2,3);
    temp<float> obj1(2.1,3.1);
    cout<<"Area of rectangle with integer dimensions "<<obj.rectangle();
    cout<<"\nArea of rectangle with float dimensions "<<obj1.rectangle();

}
```

TASK 3:

```
#include <iostream>
#include <vector>
#include <string>
#include <algorithm>
using namespace std;

int main(){
    int n;
    cout<<"Enter the number of strings. ";
    string si;
    cin>>n;
    vector<string> s{};
    for(int i=0;i<n;i++){
        cin>>si;
        s.push_back(si);
    }
    sort(s.begin(),s.end());
    cout<<"\n After sorting:\n";
    for(int i=0;i<n;i++){
        cout<<s[i]<<"\n";
    }
}
```

TASK 4:

```
#include <iostream>
using namespace std;
int main(){
    int a,b;
    cout<<"Enter the numbers a and b: ";
    cin>>a>>b;
    try{
        if((a-b)==0)throw(a-b);
        else{cout<<"a/(a-b) is : "<<a/(a-b);}
    }
    catch(int a){
        cout<<"Denominator cannot be "<<a<<".";
    }
}
```

TASK 5:

```
#include <iostream>
using namespace std;
void division(int a, int b){
    try{
        if((a-b)==0)throw(a-b);
        else{cout<<"\na/(a-b) is : "<<a/(a-b);}
    }
    catch(int a){
        cout<<"\nCaught inside division function";
        throw;
    }
}
int main(){
    try{
        division(6,3);
        division(3,3);
    }
    catch(int ){
        cout<<"\nCaught inside main. ";
    }
}
```