Assignment Q1(1203)

```
#include <iostream>
using namespace std;
class employee
{
public:
    string name;
    int age, salary, code;
    int code2 = 0;

public:
    void addemployee()
    {
        cout << "Enter your Name :";
        cin >> name;
        cout << "Enter your age,Salary and code";
        cin >> age >> salary >> code;
    }
    void display()
    {
        cout << "Name : " << name << endl;
        cout << "Salary : " << salary << endl;
        cout << "age : " << age << endl;
    }
};
class manager : public employee
{
public:
    employee *ref[10];
    int k = 0;

public:
    void addrefemp(employee m[], int s, int sup)
    {
        cout << "Which employee you want to supervise?\nEnter Employee code : ";
        int c;
        cin >> c;
        for (int i = 1; i <= s; i++)
        {
            if (c == m[i].code)
            {
                k = k + 1;
                m[i].code2 = sup;
                ref[k] = &m[i];
```

```
                break;
            }
        }
    }
    void delrefemp()
    {
        cout << "Which reference you want to delete?\nEnter Employee code : ";
        int c;
        cin >> c;
        for (int i = 1; i <= k; i++)
        {
            if (c == ref[i]->code)
            {
                ref[i]->code2 = 0;
                ref[i] = NULL;
                break;
            }
        }
    }
    void display()
    {
        employee::display();
        if (k != 0)
        {
            cout << "References :" << endl;
            for (int i = 1; i <= k; i++)
            {
                if (ref[i] != NULL)
                    cout << i << " : " << ref[i]->name << endl;
            }
        }
    }
};
void menu()
{
    cout << "Employee Management System\n1. add manager\n2. add employee\n3.
display manager\n4. display employee\n5. add employref to manager\n6. Delete
reference\n7.exit" << endl;
}
int main()
{
    int m = 0, n = 0, n2 = 0;
    employee person[20];
    manager person2[20];
    while (m != 7)
```

```
{
    menu();
    cin >> m;
    switch (m)
    {
    case 1:
        n2 += 1;
        cout << "Manager : " << n2 << endl;
        person2[n2].addemployee();
        break;
    case 2:
        n += 1;
        cout << "Employee : " << n << endl;
        person[n].addemployee();
        break;
    case 3:
        int c;
        cout << "Which manager code :";
        cin >> c;
        for (int i = 1; i <= n2; i++)
        {
            if (c == person2[i].code)
            {
                person2[i].display();
                break;
            }
        }
        break;
    case 4:
        int c2;
        cout << "Which employee code :";
        cin >> c2;
        for (int i = 1; i <= n; i++)
        {
            if (c2 == person[i].code)
            {
                person[i].display();
                cout << "supervisor code : " << person[i].code2 << endl;
                break;
            }
        }
        break;
    case 5:
        cout << "Which manager ?" << endl;
        int cc;
```

```
            cin >> cc;
            for (int i = 1; i <= n2; i++)
            {
                if (cc == person2[i].code)
                {
                    person2[i].addrefemp(person, n, cc);
                    break;
                }
            }
            break;
        case 6:
            cout << "Which manager ?" << endl;
            int ccw;
            cin >> ccw;
            for (int i = 1; i <= n2; i++)
            {
                if (cc == person2[i].code)
                {
                    person2[i].delrefemp();
                    break;
                }
            }
            break;
        case 7:
            break;
        }
    }
}
```

Assignment Q2(1203)

myframe.java

```
package com.tonmoy.moneyconverter;
import java.awt.Color;

import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.text.DecimalFormat;
import javax.swing.*;
public class myframe extends JFrame implements ActionListener{
    JTextField txf =new JTextField();
    private static final DecimalFormat df = new DecimalFormat("0.00");
    JTextField txf2 =new JTextField();
    JLabel label = new JLabel("INPUT MONEY");
    JLabel label2 = new JLabel("OUTPUT MONEY");
    JLabel label3= new JLabel();
```

```
String[] choice={"USD"};
String[] choice2={"BDT"};
JComboBox<String> combo = new JComboBox<>(choice);
JComboBox<String> combo2 = new JComboBox<>(choice2);
JButton b=new JButton("Convert");
JButton b2=new JButton("Clear");
myframe(){
    setSize(420,420);
    setTitle("MoneyConverter");
    setVisible(true);
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    setLocation(650,250);
    setResizable(false);
    getContentPane().setBackground(new Color(255, 213, 128));
    txf.setBounds(30,150,100,30);
    txf2.setBounds(270,150,120,30);
    txf.setBackground(Color.cyan);
    txf2.setBackground(Color.cyan);
    label.setBounds(30,20,100,100);
    label2.setBounds(270,20,100,100);
    label.setForeground(Color.BLUE);
    label2.setForeground(Color.BLUE);
    combo.setBounds(30,90,80,30);
    combo.setBackground(Color.GREEN);
    combo2.setBackground(Color.GREEN);
    combo2.setBounds(270,90,80,30);
    b.setBounds(140, 230, 100, 30);
    b.setBackground(Color.GREEN);
    b.setForeground(Color.red);
    b2.setBounds(140, 270, 100, 30);
    b2.setBackground(Color.GREEN);
    b2.setForeground(Color.red);
    label3.setBounds(140, 20, 150, 50);
    getContentPane().setLayout(null);
    add(txf);
    add(txf2);
    add(combo);
    add(combo2);
    add(label);
    add(b);
    add(b2);
    add(label2);
    add(label3);
    b.addActionListener(this);
    b2.addActionListener(this);
```

```
        b.setActionCommand("button");
        b2.setActionCommand("Clear");
    }
    @Override
    public void actionPerformed(ActionEvent e){
        if(e.getActionCommand().equals("button")){
        String s0 = (String) combo.getSelectedItem();
        String s = (String) combo2.getSelectedItem();
        String s1=txf.getText();
            try {
                double a=Double.parseDouble(s1);
                if(s1.isEmpty()){
                    label3.setText("Empty text-field !");
                    txf2.setText(null);
                }
                else {
                    label3.setText(null);
                    switch (s) {
                        case "BDT":
                            a = a * 105.5085;
                            String s2 = df.format(a);
                            txf2.setText(s2 + " TAKA");
                            break;
                    }
                }
            } catch (NumberFormatException jj) {
                label3.setText("Not a valid double value !");
            }
        }
        else if(e.getActionCommand().equals("Clear")){
            txf.setText(null);
            txf2.setText(null);
        }
    }
}
```

Moneyconverter.java

```
package com.tonmoy.moneyconverter;

 * @author tonmoy
public class Moneyconverter {

    public static void main(String[] args) {
        myframe test=new myframe();
    }
}
```