Assignment 2

Q1

```
#include<stdio.h>


struct Calculater{
	void add(int a,int b){
		printf("\nAddition is = %d",a+b);
		}
		void add(float a,float b){
		printf("\nAddition is = %f",a+b);
		}
		void add(int a,float b){
		printf("\nAddition is = %f",a+b);
		}
		void add(float a,int b){
		printf("\nAddition is = %f",a+b);
		}
	void sub(int a,int b){
		printf("\nSubstraction is = %d",a-b);
	}
```

```
void sub(float a,float b){
	printf("\nSubstraction is = %f",a-b);
}
void sub(int a,float b){
	printf("\nSubstraction is = %f",a-b);
}
void sub(float a,int b){
	printf("\nSubstraction is = %f",a-b);
}
void mul(int a,int b){
	printf("\nMultiplication is = %d",a*b);
}
void mul(float a,int b){
	printf("\nMultiplication is = %f",a*b);
}
void mul(float a,float b){
	printf("\nMultiplication is = %f",a*b);
}
void mul(int a,float b){
	printf("\nMultiplication is = %f",a*b);
```

```
    }
    void div(int a,int b){
        printf("\n Division is = %d",a/b);
    }
    void div(int a,float b){
        printf("\n Division is = %f",a/b);
    }
    void div(float a,float b){
        printf("\n Division is = %f",a/b);
    }
    void div(float a,int b){
        printf("\n Division is = %f",a/b);
    }

};
main(){
    Calculater s;
    s.add(45,48);
    s.add(5.7f,4.5f);
    s.add(23,3.4f);
```

```
        s.add(2.8f,78);
        ////////////////////////////
        s.mul(45,48);
        s.mul(5.7f,4.5f);
        s.mul(23,3.4f);
        s.mul(2.8f,78);
        ////////////////////////
        s.sub(456,48);
        s.sub(57.5f,4.5f);
        s.sub(23,3.4f);
        s.sub(28.34f,2);
        ///////////////////////
        s.div(16,2);
        s.div(5.7f,4.5f);
        s.div(23,3.4f);
        s.div(2.8f,78);
      }
```

Q2

```
#include<stdio.h>
struct Trangle{
```

```
float hight;
float brith;
   void sethight(float a){
      this->hight=a;
   }

       void setbrith(float b){
      this->brith=b;
      }
      float gethight(){
            return this->hight;
      }
      float getbrith(){
            return this->brith;
      }
      Trangle(){
            this->hight=00;
            this->brith=00;
      }
      Trangle(float a, float b){
```

```
            this->hight=a;
            this->brith=b;
        }
};
struct Rectangle{
    float length;
    float width;
      void setlength(float a){
        this->length=a;
        }
         void setwidth(float b){
        this->width=b;
        }
        float getlength(){
            return this->length;
        }
        float getwidth(){
            return this->width;
        }
         Rectangle(){
```

```
            this->length=00;
            this->width=00;
        }
      Rectangle(float a, float b){
            this->length=a;
            this->width=b;
        }
};
struct Circle{
    float radius;
    void setradius(float a){
        this->radius=a;
    }
      float getradius(){
        return this->radius;
    }
    Circle(){
        this->radius=0;
    }
    Circle(float a){
```

```
            this->radius=a;
        }
};
  struct Area{
        void calculatarea(Trangle a){


            printf("\n Area of Trangle is =
%f",(0.5)*(a.gethight()*(a.getbrith())));
            }
            void calculatarea(Rectangle a){
            printf("\n Area of Rectangle is =
%f",(a.getlength())*(a.getwidth()));
            }
        void calculatarea(Circle a){
            printf("\n Area of Circle is =
%f",(3.14)*((a.getradius())*(a.getradius())));
            }
  };
  main(){
        Area Cal_area;
        Trangle A(2.5,6.3);
```

```
        Cal_area.calculatarea(A);
        Rectangle b(2.5,6.3);
        Cal_area.calculatarea(b);
        Circle c(4.2);
        Cal_area.calculatarea(c);
 }
```

Q3

```
#include<stdio.h>
struct Loan{

      void approveloan(float a){

            if(a>=80){
                  printf("\nYou are eligible for a loan of up
to = 2 lakh");
      }
          else if(a>=60&&a<80){

            printf("\nYou are eligible for a loan of up to = 1
lakh");
             }
```

```
            else if(a>=40&&a<60){
              printf("\nYou are eligible for a loan of up to =
50k");
            }
            else{
                printf("\nno loan aprroved");
            }
}
    void approveloan(double a){

      if(a>=1200000){
            printf("\nYou are eligible for a loan of up to = 7
lakh");
            }
            else if (a>=1000000&&a<1200000){
                printf("\nYou are eligible for a loan of up
to = 6 lakh");
            }
            else if(a>=600000&&a<1000000){
                printf("\nYou are eligible for a loan of up
to = 5 lakh");
```

```
            }
            else if(a>=400000&&a<600000){
                printf("\nYou are eligible for a loan of up
to = 4 lakh");
            }
            else{
                printf("\n no loan approved");
            }
        }
};
main(){
    int choice;
    printf("\n if you are student press (1) \n you are a
employee press (2) = ");
    scanf("%d",&choice);
    if(choice==1){
        printf("\n Enter the marks in % = ");
        float a;
        scanf("%f",&a);
        Loan x;
        x.approveloan(a);
```

```
        }
        else if(choice==2){
                printf("\n Enter your Salary is Lpa = ");
                double a;
                scanf("%lf",&a);
                Loan y;
                y.approveloan(a);
        }
}
```