OOP

Lab 8 Tasks

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/*
Q1). Suppose you have an account in HBL Bank with an initial amount of 10k and you have t
o
add some more amount to it. Create a class 'AddAmount' with a data member named 'amount'
with
an initial value of 10k. Now make two constructors of this class as follows:
1. Create a default constructor that uses a member initializer list that allows the user
to
initialize initial value in account.
2. having a parameter which is the amount that will be added to the account.
Create an object of the 'AddAmount' class and display the final amount in the account.
*/

#include <iostream>
using namespace std;
class AddAmount{
    private:
        int initAmount=10000;
        double amount;
    public:
        AddAmount():amount(initAmount) {}
        AddAmount(double addAmount):amount(initAmount+addAmount) {

        }
        void printAmount(){
            cout << "Amount: " << amount << endl;
        }
};
int main(){
    AddAmount a1(500), a2;
    a1.printAmount();
    a2.printAmount();
}
```

```
/*
    Q2). Declare a class Area which perform the following tasks using constructor chainin
g:
        1. Create a default constructor that uses a member initializer list that initiali
ze the data
        members (length, width and breadth)
        2. Calculate area of rectangle when length and width are passed.
        3. Calculate area of circle when radius is passed.
        4. Calculate area of cube when length, width and breadth is passed.
        5. Define destructor at the end of Area class.
*/
#include <iostream>
using namespace std;

#define PI 3.14

class Area{
    public:
        int radius, length, width, breadth;

        Area(int r):radius(r){
            cout << "Area of Circle: " << PI*radius*radius << endl;
        }
        Area(int l, int w):length(l), width(w){
            cout << "Area of rectangle: " << length*width << endl;
        }
        Area(int l, int w, int b):length(l),width(w), breadth(b){
            cout << "Area of cube: " << length*width*breadth << endl;
        }
};

int main(){
    Area a1(5);
    Area a2(6,5);
    Area a3(2,8,9);
    return 0;
}
```