~\OneDrive\Desktop\p1.c++

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#include<iostream>
#include <iomanip>
#include<cmath>
using namespace std;
int main()
{//1
char name[15];
int age;
cout<<"enter your name:"<<endl;
cin>>name;
cout<<"enter your age:"<<endl;
cin>>age;
cout<<"hello "<<name<<", you are "<<age<<" years old"<<endl;
//2
int a,b;
cout<<"enter 2 numbers:"<<endl;
cin>>a>>b;
cout<<"sum is:"<<a+b<<endl;
//3
float a,b;
char c;
cout<<"enter 2 numbers:"<<endl;
cin>>a>>b;
cout<<"enter your choice:"<<endl;
cin>>c;
cout << fixed << setprecision(2);
switch(c){
    case '+':cout<<a+b;
    break;
    case '-':cout<<a-b;
    break;
    case '*':cout<<a*b;
    break;
    case '/':cout<<(a/b);
    break;
    default:cout<<"invalid choice";
    break;
}
cout << fixed << setprecision(2);
float a,b;
cout<<"enter 2 nums:"<<endl;
cin>>a>>b;
cout<<a/b<<endl;
int ci,p,r,n,t;
cin>>p>>r>>n>>t;
ci=pow((1+(r/n)),n*t);
cout<<ci<<endl;

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//6
int l,b;
cout<<"enter the length and width of rectangle"<<endl;
cin>>l>>b;
cout<<"area:"<<l*b<<" perimeter:"<<2*(l+b)<<endl;
//7
int a,b,c;
cout<<"provide 2 num:"<<endl;
cin>>a>>b;
c=b;
b=a;
a=c;
cout<<"a="<<a<<"b="<<b<<endl;
a=a+b;
b=a-b;
a=a-b;
cout<<"a="<<a<<"b="<<b<<endl;
//8
char fn[10],ln[10];
cout<<"enter your full name:"<<endl;
cin>>fn>>ln;
cout<<"thankyou "<<fn<<ln<<" for staying in our hotel"<<endl;
//9
char ch;int n;float a;
cout<<"enter integer:"<<endl;
cin>>n;
cout<<"enter character:"<<endl;
cin>>ch;
cout<<"floating number:"<<endl;
cin>>a;
cout<<"character |"<<"integer |"<<"floating number |"<<endl;
cout<<ch<<"|"<<n<<"|"<<a<<endl;
//11
int a,r,c=0;
cout<<"enter a number:"<<endl;
cin>>a;
while(a!=1){
    r=a%2;
    a=a/2;
    if(r==1){
        c++;
    }
}
cout<<c<<endl;
//12
int a,b,c;
cout<<"enter values of a,b and c with respect to the equation ax^2+bx+c:"<<endl;
cin>>a>>b>>c;
int r=pow(b,2)-4*a*c;
if(r>0){
```

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    cout<<"the roots are real and unequal"<<endl;
    cout<<"roots are:"<<endl;
    cout<<((-b)+pow(r,0.5))/a<<"\n"<<((-b)-pow(r,0.5))/a<<endl;
}
else if(r==0){
    cout<<"the roots are real and equal"<<endl;
    cout<<"roots are:"<<endl;
    cout<<((-b)+pow(r,0.5))/a<<"\n"<<((-b)-pow(r,0.5))/a<<endl;
}
else{
    cout<<"the roots are imaginary"<<endl;
}
//ATM
int choice,balance,b,label_1;
label_1:
cout<<"choice (1):withdrawal\nchoice (2):deposit\nchoice (3):balance inquiry\nchoice (4):exit"
<<endl;
cout<<"enter balance and choice:"<<endl;
return;
cin>>balance>>choice;
switch (choice){
    case 1:cout<<"enter amount for withdrawal:"<<endl;
    cin>>b;
    cout<<"ammount successfully withdrawed"<<endl;
    if(balance>b)
    {
      cout<<"ammount withdrawed:"<<b<<endl;
      balance-=b;
      goto label_1;
    }
    else
    {
      cout<<"not sufficient balance"<<endl;
      goto label_1;
    }
    break;
    case 2:cout<<"enter amount for deposit:"<<endl;
    cin>>b;
    cout<<"ammount successfully deposit"<<endl;
    cout<<"ammount deposit:"<<b<<endl;
    balance+=b;
    goto label_1;
    break;
    case 3:cout<<"balance:"<<balance<<endl;
    goto label_1;
    break;
    case 4:exit(0);
    default:cout<<"invalid choice"<<endl;
    goto label_1;
    break;
```

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}
//14
int a,b,c;
cout<<"enter 3 sides of triangle:"<<endl;
cin>>a>>b>>c;
if(a<b+c||b<a+c||c<b+a){
    if(a==b&&b==c&&c==a){
        cout<<"equilateral triangle"<<endl;
    }
    else if(a!=b&&b!=c&&c!=a){
        cout<<"scaler triangle"<<endl;
    }
    else{
        cout<<"isoceles triangle"<<endl;
    }
}
else{
    cout<<"not a triangle"<<endl;
}
//15
int a,b,c,d;
cout<<"provide 4 numbers:"<<endl;
cin>>a>>b>>c>>d;
cout<<"result is "<<(a^b)+(c&d)<<endl;


}

```