```cpp
// File: invest.cpp
// Created by: Isaiah Green
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//compute the value of an investment after a certain number of years

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

int main()
{

  int  x, R, quarters;
  double Y, D, P;

  cout << "Enter initial investment (dollars): ";
  cin >> x; // initial investment=x

  cout << "Enter interest rate per year (percentage): ";
  cin >> R; // interest rate=R

  cout << "Enter number of quarters: ";
  cin >> quarters;

  //compute profit and final investment

  Y= quarters*(0.25);                 // years=Y
  D= x*pow((1+(double(R)/100)),Y);        // dollars=D
  P= D-x;                             // profit=P

  cout << "Value of your investment after " << Y << " year(s) is "
       << D << " dollars." << endl;
  cout << "Profit from your investment after " << Y << " year(s) is "
       << P << " dollars." << endl;



  return(0);
}
```