P4)

#include <iostream>

#include <string>

using namespace std;

class Shape

{ protected:

int dim[10],n;

void setShapeData()

{

cout<<"enter the no of dimensions\n";

cin>>n;

cout<<"enter the length for "<<n<<" sides\n";

for(int i=0;i<n;i++)

{ cin>>dim[i];}

}

int\* getDim(){return dim;}

int getSize(){ return n;}

};

class Quadrilateral: public Shape

{ int no\_of\_equalsides;

public:

void setQuadData()

{ setShapeData();

cout<<"enter no of equal sides\n";

cin>>no\_of\_equalsides;

}

int get\_EqualSides()

{ return no\_of\_equalsides; }

};

class Rectangle: public Quadrilateral

{ public:

void computeArea()

{ int \*d;

d=getDim();

int prod=1;

for(int i=0;i<getSize();i++)

{ prod=prod\*dim[i];

}

cout<<"area="<<prod<<endl;

}

};

int main()

{ Rectangle r;

r.setQuadData();

r.computeArea();

return 0;

}

P4)

OUTPUT:

