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Program: BSCS 2A Instructor: Sir Shahzad

OOP

LAB TASK 31-03-2023

#include<iostream>

using namespace std;

class One{

public:

string studentname;

void getstudentname(){

cout<<"enter the name of student:"<<endl;

cin>>studentname;

}

private:

int admissionnumber;

void getadmissionnumber(){

cout<<"enter the admission number";

cin>>admissionnumber;

}

protected:

int rollno ;

void getrollno(){

cout<<"enter the rollno";

cin>>rollno;

}

//null constructor

public:

One(){

this->studentname=" ";

this->admissionnumber=0;

this->rollno=0;

}

};

class Two: public One {

public:

int admissionnumber;

void getadmissionnumber(){

cout<<"enter the admission number:"<<endl;

cin>>admissionnumber;

}

private:

string studentname;

void getstudentname(){

cout<<"enter the name of student:"<<endl;

cin>>studentname;

}

protected:

int rollno ;

void getrollno(){

cout<<"enter the rollno";

cin>>rollno;

}

//null constructor

public:

Two(){

this->studentname=" ";

this->admissionnumber=0;

this->rollno=0;

}

};

class Three{

protected:

string studentname;

void getstudentname(){

cout<<"enter the name of student:"<<endl;

cin>>studentname;

}

private:

int admissionnumber;

void getadmissionnumber(){

cout<<"enter the admission number";

cin>>admissionnumber;

}

public:

int rollno ;

void getrollno(){

cout<<"enter the roll no";

cin>>rollno;

}

//null constructor

public:

Three(){

this->studentname=" ";

this->admissionnumber=0;

this->rollno=0;

}

};

class Four:public Three,Two,One{

public:

string studentname;

void getstudentname(){

cout<<"enter the name of student:"<<endl;

cin>>studentname;

}

public:

int admissionnumber;

void getadmissionnumber(){

cout<<"enter the admission number";

cin>>admissionnumber;

}

public:

int rollno ;

void getrollno(){

cout<<"enter the roll no";

cin>>rollno;

}

};

class Five{

public:

string studentname;

void getstudentname(){

cout<<"enter the name of student:"<<endl;

cin>>studentname;

}

private:

int admissionnumber;

void getadmissionnumber(){

cout<<"enter the admission number";

cin>>admissionnumber;

}

protected:

int rollno ;

void getrollno (){

cout<<"enter the roll no ";

cin>>rollno ;

}

//null constructor

public:

Five(){

this->studentname=" ";

this->admissionnumber=0;

this->rollno=0;

}

};

class Six:public One{

public:

int admissionnumber;

void getadmissionnumber(){

cout<<"enter the admission number:"<<endl;

cin>>admissionnumber;

}

private:

string studentname;

void getstudentname(){

cout<<"enter the name of student:"<<endl;

cin>>studentname;

}

protected:

int rollno ;

void getrollno(){

cout<<"enter the roll no :"<<endl;

cin>>rollno ;

}

//null constructor

public:

Six(){

this->studentname=" ";

this->admissionnumber=0;

this->rollno=0;

}

};

class Seven:public Six{

public:

int rollno ;

void getrollno (){

cout<<"enter the roll no :"<<endl;

cin>>rollno;

}

protected:

string studentname;

void getstudentname(){

cout<<"enter the name of student:"<<endl;

cin>>studentname;

}

private:

int admissisonnumber;

void getadmissisonnumber(){

cout<<"enter the admissison number"<<endl;

cin>>admissisonnumber;

}

//null constructor

public:

Seven(){

this->studentname=" ";

this->admissionnumber=0;

this->rollno=0;

}

};

class Eight:public Seven{

public:

string studentname;

void getstudentname(){

cout<<"enter the name of student:"<<endl;

cin>>studentname;

}

private:

int admissionnumber;

void getadmissionnumber(){

cout<<"enter the admission number";

cin>>admissionnumber;

}

protected:

int rollno ;

void getrollno(){

cout<<"enter the roll no";

cin>>rollno;

}

//null constructor

public:

Eight(){

this->studentname=" ";

this->admissionnumber=0;

this->rollno=0;

}

};

class Nine:public Eight,Seven{

public:

int admissionnumber;

void getadmissionnumber(){

cout<<"enter the admission number:"<<endl;

cin>>admissionnumber;

}

private:

string studentname;

void getstudentname(){

cout<<"enter the name of student:"<<endl;

cin>>studentname;

}

protected:

int rollno ;

void getrollno(){

cout<<"enter the roll no:"<<endl;

cin>>rollno;

}

//null constructor

public:

nine(){

this->studentname=" ";

this->admissionnumber=0;

this->rollno=0;

}

};

class Ten:public Seven,Eight,Nine{

public:

int rollno ;

void getrollno(){

cout<<"enter the roll no:"<<endl;

cin>>rollno;

}

protected:

string studentname;

void getstudentname(){

cout<<"enter the name of student:"<<endl;

cin>>studentname;

}

private:

int admissionnumber;

void getadmissionnumber(){

cout<<"enter the admission number"<<endl;

cin>>admissionnumber;

}

//null constructor

public:

Ten(){

this->studentname=" ";

this->admissionnumber=0;

this->rollno=0;

}

};

int main(){

One st1;

st1.getstudentname();

Two st2;

st2.getadmissionnumber();

Three st3;

st3.getrollno();

Four st4;

st4.getstudentname();

st4.getadmissionnumber();

st4.getrollno();

Five st5;

st5.getstudentname();

Six st6;

st6.getadmissionnumber();

Seven st7;

st7.getrollno();

Eight st8;

st8.getstudentname();

Nine st9;

st9.getadmissionnumber();

Ten st10;

st10.getrollno();

}

EXPLANATION:

In this code I make ten classes each class have 3 data members of student name, admission number and roll number and function of void get with different access modifiers public, private and protected that specify the access of each data member and function it also contain null and parametric constructors. I also used inheritance in this code.

But after executing this code there are errors in this code.

ERRORS:

In line number 84,214,241, 269 and 289 there is an error of inaccessible class due to ambiguity.

In line number 305 there is an error of ambiguous reference to admission number.