**VARUN KUMAR**

**2K19-IT-140**

**OOP LAB - 4**

**#include <iostream>**

**using namespace std;**

**class student\_DTU{**

**string name;**

**int roll,marks,Package\_offered,Age;**

**char P\_grade,grade;**

**int College\_id;**

**public:**

**void Package\_grade(){**

**if(Package\_offered>15) P\_grade='A';**

**else P\_grade='B';**

**}**

**void Name\_ascii(){**

**cout<<(int)name[0];**

**}**

**void Marks\_grade(){**

**if(marks>80) grade='A';**

**else if(marks>60) grade='B';**

**else grade='C';**

**}**

**student\_DTU(){**

**roll=0; marks=0;**

**Package\_offered=0;**

**Age=0;**

**cout<<"Welcome - ";**

**}**

**void get\_data(){**

**cout<<"Enter name , roll , marks , Package\_offered , Age , College\_id:- "<<endl;**

**cin>>name>>roll>>marks>>Package\_offered>>Age>>College\_id;**

**}**

**int Package\_offered\_get(){**

**return Package\_offered;**

**}**

**int Age\_get(){**

**return Age;**

**}**

**} S ; //global object**

**class college{**

**string name;**

**int College\_id;**

**string State;**

**int Sem\_fees\_btech;**

**int Percentage\_stud\_placement;**

**public:**

**void Remarks\_for\_college\_print(){**

**if(Percentage\_stud\_placement>80) cout<<"Good";**

**else cout<<"not good";**

**}**

**college(){**

**College\_id=0; Sem\_fees\_btech=0;**

**Percentage\_stud\_placement=0;**

**}**

**void get\_data(){**

**cout<<"Enter name , College\_id , State , Sem\_fees\_btech , Percentage\_stud\_placement:- "<<endl;**

**cin>>name>>College\_id>>State>>Sem\_fees\_btech>>Percentage\_stud\_placement;**

**}**

**int Sem\_fees\_btech\_get(){**

**return Sem\_fees\_btech;**

**}**

**} C; // global declare**

**int calculate\_Tax(){**

**int tax=abs(((S.Package\_offered\_get())/S.Age\_get()) - (C.Sem\_fees\_btech\_get()\*8));**

**return tax;**

**}**

**int main(){**

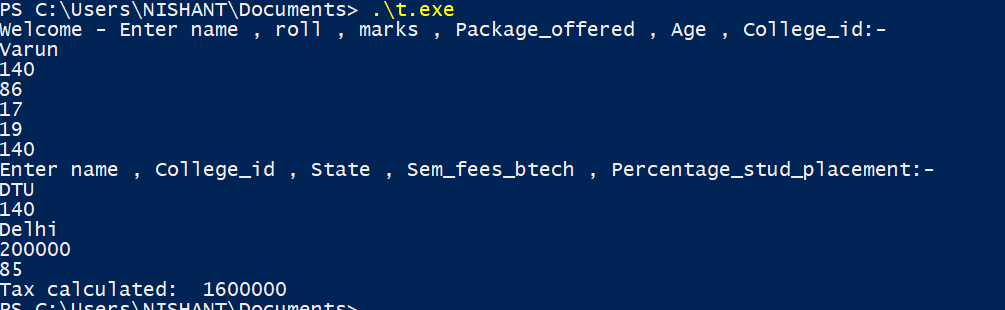
**S.get\_data();**

**C.get\_data();**

**cout<<"Tax calculated: "<<calculate\_Tax();**

**return 0;**

**}**



**2.**

**#include <iostream>**

**using namespace std;**

**class car{**

**int model\_no;**

**string name;**

**int price;**

**float insurance\_expected;**

**public:**

**float cal\_insurance(){**

**insurance\_expected=(float)price\*0.010;**

**return insurance\_expected;**

**}**

**void get\_data(){**

**cout<<"enter model\_no , name and price :- "<<endl;**

**cin>>model\_no>>name>>price;**

**}**

**void print(){**

**cout<<endl;**

**cout<<"model\_no: "<<model\_no<<endl;**

**cout<<"name: "<<name<<endl;**

**cout<<"price: "<<price<<endl;**

**cout<<"insurance\_expected: "<<insurance\_expected<<endl;**

**}**

**car(){**

**model\_no=0; price=0;**

**insurance\_expected=0;**

**}**

**} C ; //global object**

**class insurance\_policy{**

**int policy\_no;**

**string name\_of\_policy;**

**int amount;**

**float discount;**

**public:**

**float cal\_discount(){**

**discount=(float)amount\*0.10;**

**return discount;**

**}**

**void get\_data(){**

**cout<<"enter policy\_no , name\_of\_policy , amount : - "<<endl;**

**cin>>policy\_no>>name\_of\_policy>>amount;**

**}**

**void print(){**

**cout<<endl;**

**cout<<"policy\_no: "<<policy\_no<<endl;**

**cout<<"name\_of\_policy: "<<name\_of\_policy<<endl;**

**cout<<"amount: "<<amount<<endl;**

**cout<<"discount: "<<discount<<endl;**

**}**

**insurance\_policy(){**

**policy\_no=0;**

**amount=0;**

**discount=0;**

**}**

**} P ; //global object**

**class service\_station{**

**string name,location;**

**float average\_bill;**

**float discount;**

**public:**

**float cal\_discount(){**

**discount=average\_bill\*0.10;**

**return discount;**

**}**

**void get\_data(){**

**cout<<"enter name , location , average\_bill:- "<<endl;**

**cin>>name>>location>>average\_bill;**

**}**

**void print(){**

**cout<<endl;**

**cout<<"name: "<<name<<endl;**

**cout<<"location: "<<location<<endl;**

**cout<<"average\_bill: "<<average\_bill<<endl;**

**cout<<"discount: "<<discount<<endl;**

**}**

**} S ; //global object**

**class person\_data{**

**float my\_car\_insurance;**

**float my\_insur\_discount;**

**float my\_service\_station\_amount;**

**float total\_expenditure;**

**public:**

**void car\_total\_Expenditure(){**

**total\_expenditure=my\_car\_insurance + my\_insur\_discount + my\_service\_station\_amount;**

**}**

**void set\_data(){**

**my\_car\_insurance=C.cal\_insurance();**

**my\_insur\_discount=P.cal\_discount();**

**my\_service\_station\_amount=S.cal\_discount();**

**}**

**void print(){**

**cout<<endl;**

**cout<<"my\_car\_insurance: "<<my\_car\_insurance<<endl;**

**cout<<"my\_insur\_discount: "<<my\_insur\_discount<<endl;**

**cout<<"my\_service\_station\_amount: "<<my\_service\_station\_amount<<endl;**

**cout<<"total\_expenditure: "<<total\_expenditure<<endl;**

**}**

**} PD ; //global object**

**int main(){**

**C.get\_data();**

**P.get\_data();**

**S.get\_data();**

**C.cal\_insurance();**

**P.cal\_discount();**

**S.cal\_discount();**

**PD.set\_data();**

**PD.car\_total\_Expenditure();**

**C.print();**

**P.print();**

**S.print();**

**PD.print();**

**return 0;**

**}**

