

Important Classes:

1. BTech(RollNumber r , string hostel , Faculty facad, float cgpa)

Member functions:

```
string getHostel() ;  
Faculty getFacad() ;  
void changeHostel(string hostel) ;  
Faculty getBTPGuide() ;  
setBTPGuide(Faculty);
```

2. DD(RollNumber r , string hostel , Faculty facad , float cgpa)

Member functions:

```
string getHostel() ;  
Faculty getFacad() ;  
void changeHostel(string hostel) ;  
Faculty getDDPGuide() ;  
Faculty getTASupervisor();  
setDDPGuide(Faculty) ;  
setTASupervisor(Faculty) ;
```

3. IITM(vector<Student>& students , vector<Faculty>& faculties)

Member functions:

```
bool checkConstraints(Faculty facad) ;  
void printStudentsByRoll();  
void printStudentsByGuide();  
void printStudentsByHostel();  
void printStudentsUnassigned();  
void printAdvisees(Faculty facad , string hostel);  
void printPercentage()  
Faculty maxProjectees();
```

Helper Classes:

1. RollNumber

2. Faculty(string name , bool isPermanent)

Member functions:

```
int numBTechProjectees() ;  
int numDDProjectees() ;  
int numTAs() ;
```

3. Student(RollNumber r , string hostel , Faculty facad , float cgpa , bool isBTech)