Question 2:

最早	持续
最晚	松驰

用来判断项目的进度.

请根据下表的说明，构建一个 PERT 图，并进行关键路

径分析(20 points)

Tasks	Durations(days) 持续 时间	Predecessor 前驱结点
A	1	None
B	15	A
C	2	B
D	3	A
E	3	C,D
F	15	D
G	10	E
H	2	D
I	15	F,G,H
J	1	I
K	30	J
L	15	K

QUESTION3: (60 points)

A large international IT company plans to provide an Employee Accommodation Service that helps novice employees to find properties to rent in the city in which they are working. Aninformation system named Employee Accommodation Service System is required to maintain lists of landlords, their properties and of employee seeking accommodation.

All of the properties are owned by landlords; each property is owned by one landlord, though some landlords own several properties. The unique social security number, name, address and telephone number of landlords are kept. When new properties are added to the system they are allocated a unique identifying number and details are taken of the address, type of property (for example, flat, terraced house, detached house), the maximum number of tenants is suitable for and the amount of the rent. Landlords are charged a fee for each property that is added to the system.

Employees seeking accommodation have to register with the system providing their employee number, name, current address, telephone number, their date of birth and gender. Once registered, an employee can be provided with a list of available properties. If an employee makes a request to view a properties, the system arranges a viewing with the landlord. Details are kept of each viewing that is arranged including the date on which it took place and which student or employees were involved (friends often seek accommodation

together).

Landlords notify the system when a property is no longer available for rent and when a property is once again available. In both cases the system updates the property file so that employee seeking accommodation can be given an accurate list. （系统和参与者之间的数据交互）

上下文数据流图.

- Draw the context data flow diagram and functional 功能分解图.（系统的功能）
  decomposition diagram for Employee
  Accommodation Service System(15 points)

  E-R图

- Produce an Entity Relationship Diagram (Logical data model) and a set of normalized tables for the
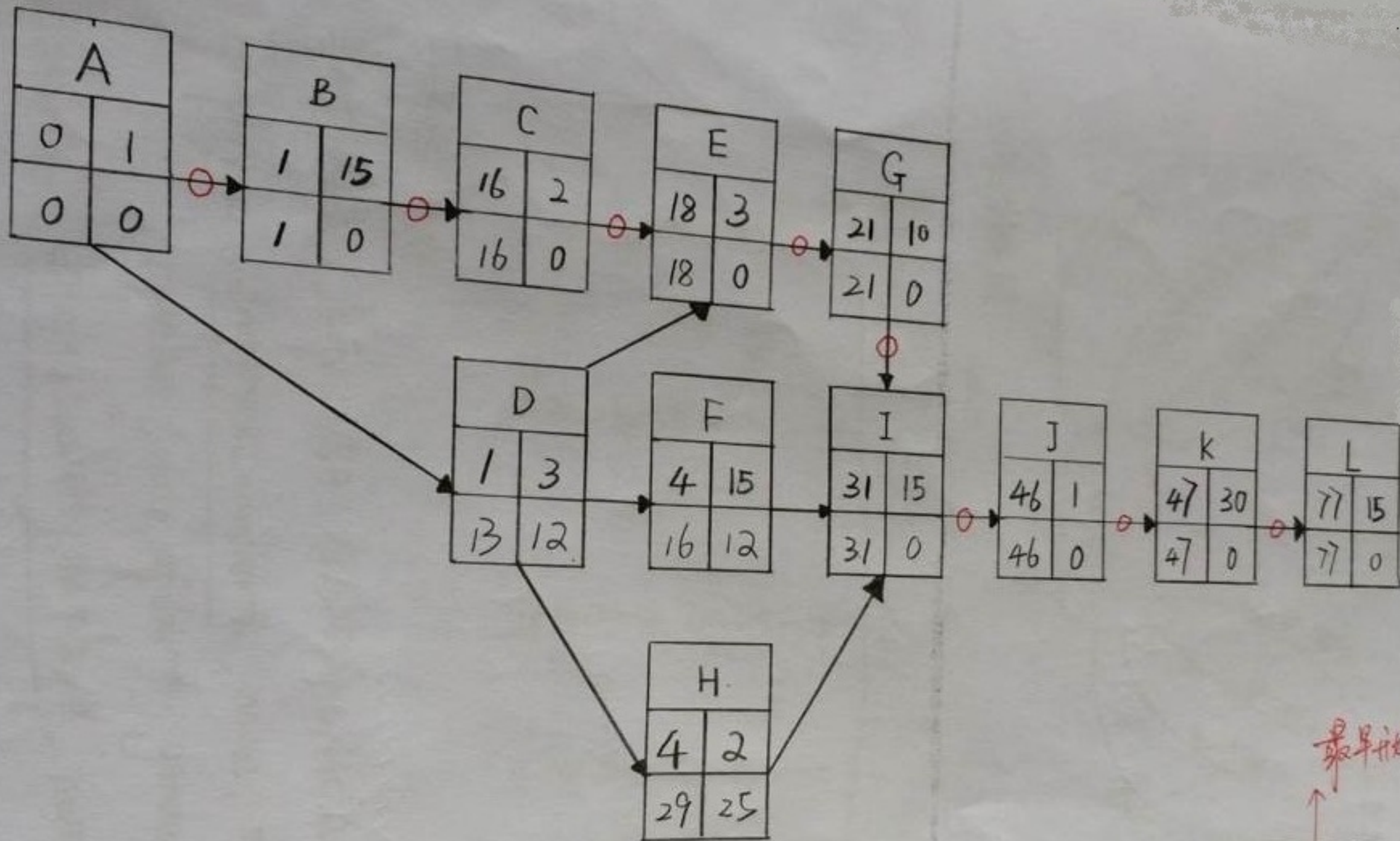 表
  scenario.(20 points)

- It has been decided that the system will be developed using object oriented analysis and design (OOA/OOD) methodology. 用例图.

1. Draw a UML Use Case diagram for the Employee Accommodation Service System and write the expanded description of a primary use case. (15 points). 一个主要的用例.
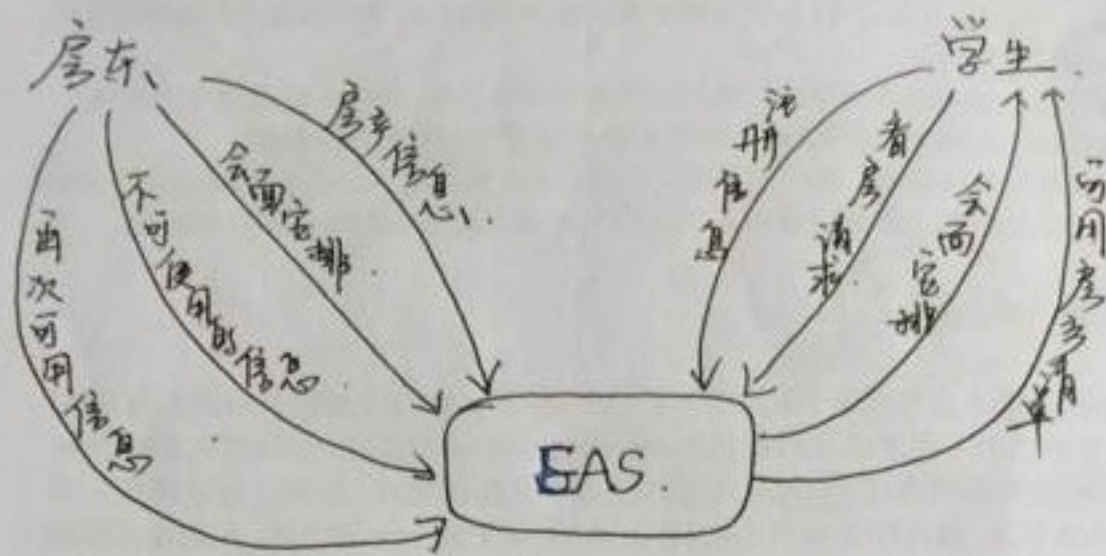
2. Design and initial Analysis Class Model that shows the process and data required to support Employee Accommodation Service System.(10
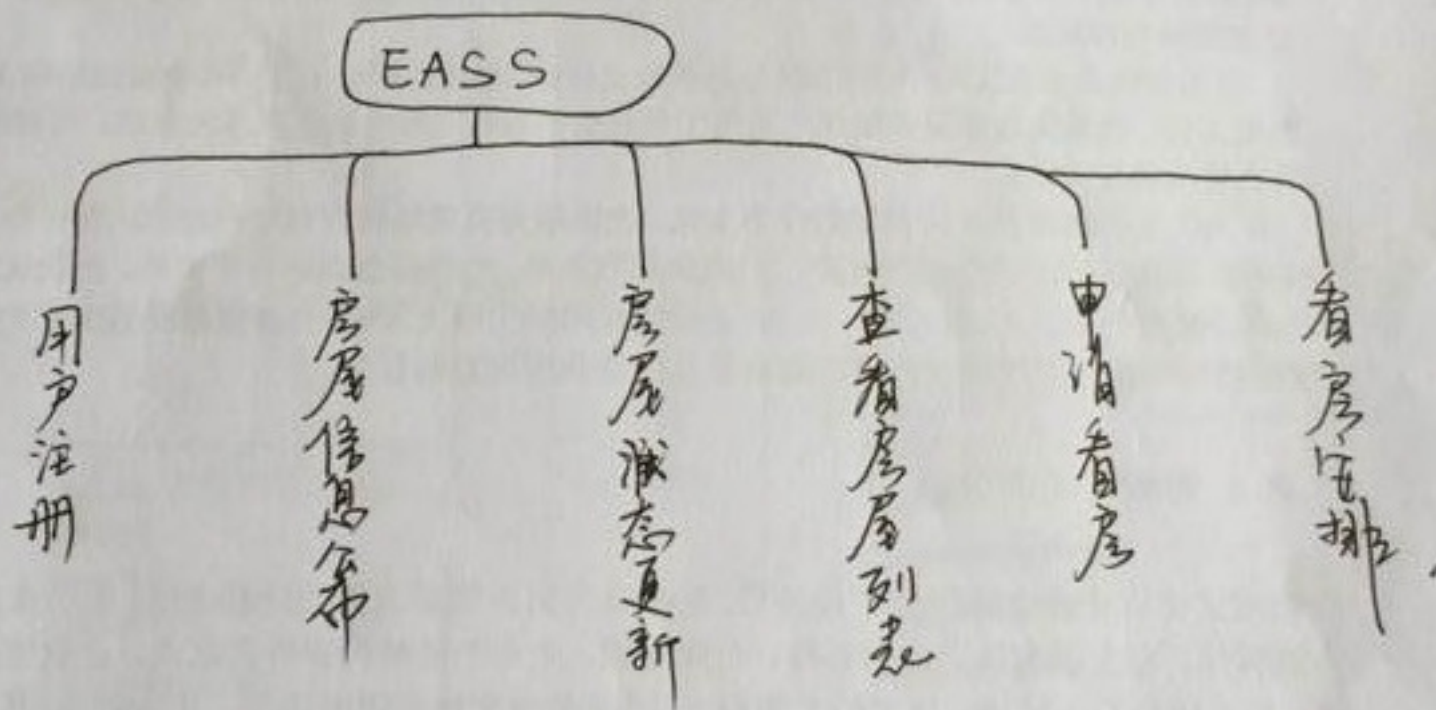
A	
0	1
0	0

B	
1	15
1	0

C	
16	2
16	0

E	
18	3
18	0

G	
21	10
21	0

D	
1	3
13	12

F	
4	15
16	12

I	
31	15
31	0

J	
46	1
46	0

k	
47	30
47	0

L	
77	15
77	0

H	
4	2
29	25

关键路径是: A B C E G I J K L = 92

最早开始

安排的 开始时间	安排能 结束时间	→ 持续时间
实际开始 时间	真正结束 时间	→ 松弛

最晚开始

上下文数据流图
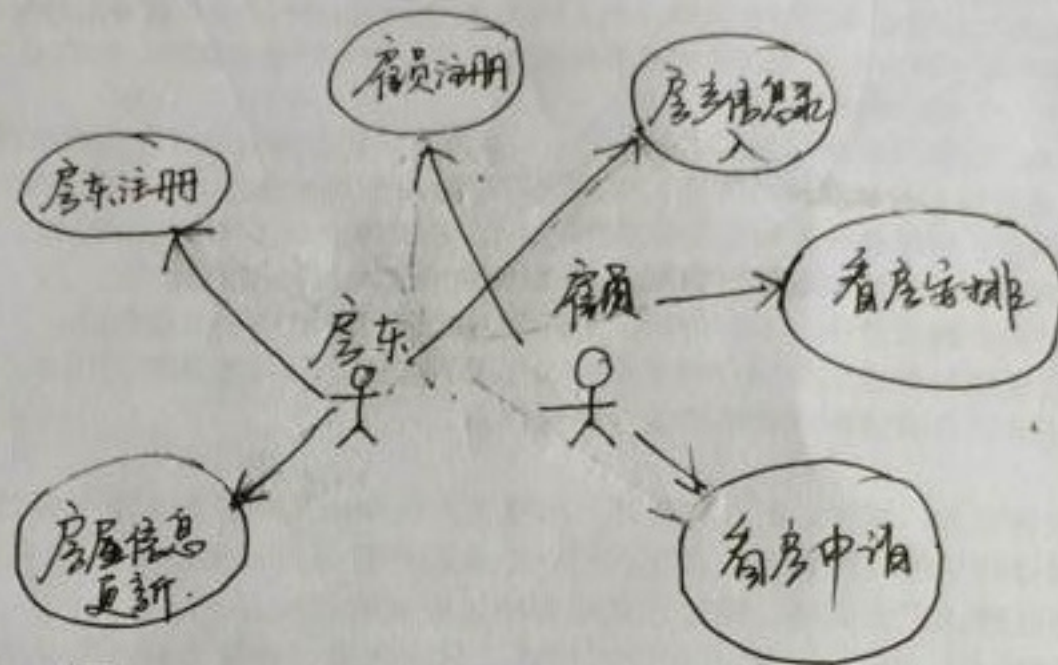

功能分解图

E-R图.与表.

实体：催员；房东；房子；看房安排（房东房客房屋，时间），看房申请.

Employee (employee_number#, name, current address, telephone number, date of birth, gender).

Landlord (social security number#, name, address, telephone number)

Property (identifying-number#, 、、、、、、).

Viewing (viewing id. date, social security number
ViewingEmployees (viewing id. employee number.

Use Cases (3个动作分)．

表格用例怎么写:

含义．名称 前置条件．主备财事件流程．后置条件．异常流程．

类图: