

Assignment - 1

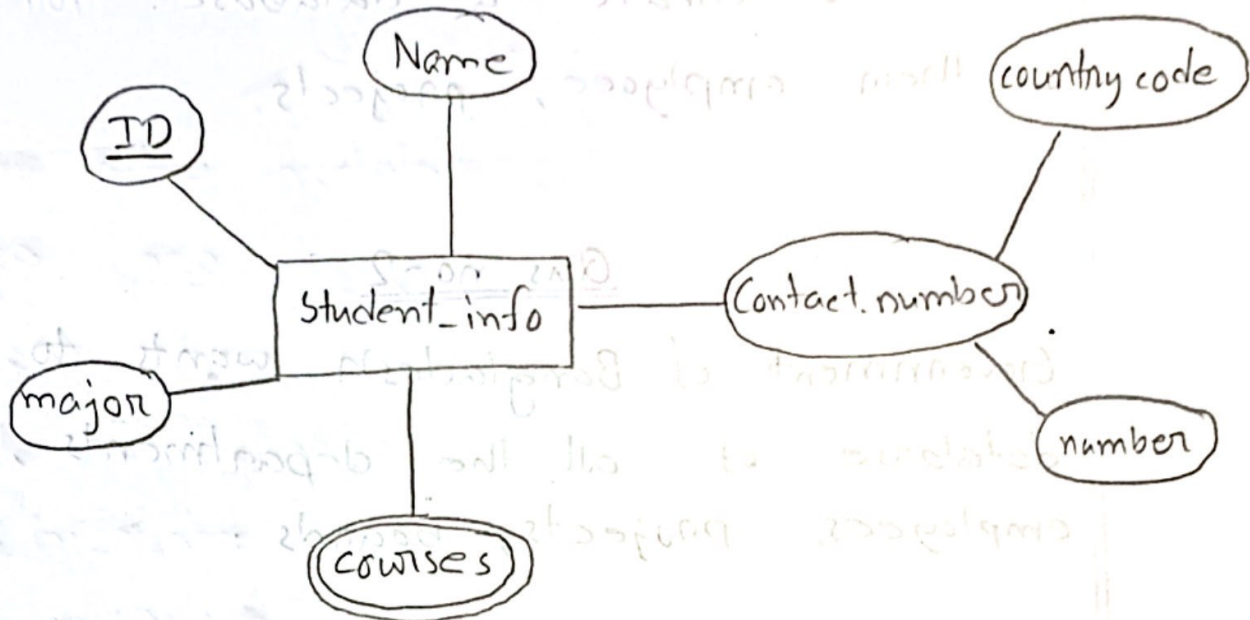
Pulak Deb Roy

23241078

sec : 3

CSE 370

Qus no-1



Here, ID is the only key attribute. Courses is multivalued attribute. Contact number is a composite attribute. Name, major are just simple attribute.

Qus no-2

Government of Bangladesh wants to a database of all the departments, their employees, projects, boards.

① Department is a entity and name is key attribute, no of employee, location is simple attribute.

It has relation with project and employee entity.

② Relation between department and employee is salary which has a derived attribute called "grade".

Employee entity has one key attribute "em-id" where all employee id stores, simple

attribute name, and a multivalued attribute called address where each employee's present and permanent address stores.

It has a relation with board entity and an identify relation with family.

③ Family is a weak entity. It has a unique attribute connection called name with employee and a simple attribute called relation.

Family and employee has an identify relation called dependent.

④ Department and project has a relation called controls. which means we can see which department controls which projects. Under project, there are multiple attributes such as project-id (key attribute), location (simple attribute), and investment attribute. To see the investment, we can find out how

the projects are being financed.

Project and board are connected through management relation which has a attribute tenure.

⑤ Board has two relation with project and employee. Employee are assigned to boards to govern and board manage all the projects. In board, there's a key attribute mem_id, simple attribute start date. Also a derived attribute called duration. There is also a recursive relation called supervise.

