Title: Payroll

Features:

1. Employee
2. Attendance
3. Salary
4. Access Control List

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| --- | --- | --- | --- |
| Employee  CardNo  Name  DateOfBirth  FathersName  MothersName  Contact  Address  Email  Gender  BloodGroup  Religion  MaritalStatus  NationalID  Education  Experience  Skills  Image | Attendance  Employee  InTime  OutTime  Present/Absent  AttendanceDate  TotalAttendance | Salary  Employee  Basic  HouseRent  Medical  Food  Conveyance  GrossTotal  AttendanceBonus  OverTime  Advanced  Stamp  GrandTotal |  |
|  |  |  | AccessControlList  Employee  Password  Type  LogHistory |

First Normal Form: Define PK and FK

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| **Employee**  **Id**  CardNo  Name  DateOfBirth  FathersName  MothersName  Contact  Address  Email  Gender  BloodGroup  Religion  MaritalStatus  NationalID  Education  Experience  Skills  Image | **Attendance**  **Id**  EmployeeId  InTime  OutTime  Present/Absent  AttendanceDate  TotalAttendance | **Salary**  **Id**  EmployeeId  Basic  HouseRent  Medical  Food  Conveyance  GrossTotal  AttendanceBonus  OverTime  Advanced  Stamp  GrandTotal |  |
|  |  |  | **AccessControlList**  EmployeeId  CardNo  Password  Type  LogHistory |

Second Normal Form: Make new table with common data field, Define PK and FK

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| **Employee**  **Id**  CardNo  Name  DateOfBirth  FathersName  MothersName  Contact  Address  Email  GenderId  BloodGroupId  ReligionId  MaritalStatusId  NationalID  EducationId  Experience  Skills  ImageId | **Attendance**  **Id**  EmployeeId  InTime  OutTime  PresentAbsentId  AttendanceDate  TotalAttendance  **MaritalStatus**  **Id**  Name  **Education**  **Id**  Name  **Image**  **Id**  Title | **Salary**  **Id**  EmployeeId  Basic  HouseRent  Medical  Food  Conveyance  GrossTotal  AttendanceBonus  OverTime  Advanced  Stamp  GrandTotal  **PresentAbsent**  **Id**  Name |  |
| **Gender**  **Id**  Name | **BloodGroup**  **Id**  Name | **Religion**  **Id**  Name | **AccessControlList**  EmployeeId  CardNo  Password  Type  LogHistory |

Third Normal Form: Remove and make new table with irregular(thakte pare r na o thakte pare) and repeated data field, Define PK and FK

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| **Employee**  **Id**  CardNo  Name  DateOfBirth  FathersName  MothersName  Address  Email  GenderId  BloodGroupId  ReligionId  MaritalStatusId  NationalID  **EmployeeContact**  **Id**  EmployeeId  Contact  **EmpoyeeEducation**  EmployeeId  EducationId  Year | **Attendance**  **Id**  EmployeeId  InTime  OutTime  PresentAbsentId  AttendanceDate  TotalAttendance  **MaritalStatus**  **Id**  Name  **Education**  **Id**  Name  Description  **EmployeeImage**  **Id**  EmployeeId  Title | **Salary**  **Id**  EmployeeId  Basic  HouseRent  Medical  Food  Conveyance  GrossTotal  Stamp  GrandTotal  **PresentAbsent**  **Id**  Name  **SalaryOvertime**  **Id**  SalaryId  Hours  Rate  Total | **EmployeeExperiences**  **Id**  EmployeeId  Name  Description  **EmployeeSkills**  **Id**  EmployeeId  Name  Description  **SalaryAttendanceBonus**  **Id**  SalaryId  AttBonus  **SalaryAdvanced**  **Id**  SalaryId  Amount |
| **Gender**  **Id**  Name | **BloodGroup**  **Id**  Name | **Religion**  **Id**  Name | **AccessControlList**  EmployeeId  CardNo  Password  Type  LogHistory |

Fourth Normal Form: Remove redundant and dependant data field

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| **Employee**  **Id**  CardNo  Name  DateOfBirth  FathersName  MothersName  Address  Email  GenderId  BloodGroupId  ReligionId  MaritalStatusId  NationalID  **EmployeeContact**  **Id**  EmployeeId  Contact  **EmpoyeeEducation**  EmployeeId  EducationId  Year | **Attendance**  **Id**  EmployeeId  InTime  OutTime  PresentAbsentId  AttendanceDate  **MaritalStatus**  **Id**  Name  **Education**  **Id**  Name  Description  **EmployeeImage**  **Id**  EmployeeId  Title | **Salary**  **Id**  EmployeeId  Basic  HouseRent  Medical  Food  Conveyance  Stamp  GrandTotal  **PresentAbsent**  **Id**  Name  **SalaryOvertime**  **Id**  SalaryId  Hours  Rate | **EmployeeExperiences**  **Id**  EmployeeId  Name  Description  **EmployeeSkills**  **Id**  EmployeeId  Name  Description  **SalaryAttendanceBonus**  **Id**  SalaryId  AttBonus  **SalaryAdvanced**  **Id**  SalaryId  Amount |
| **Gender**  **Id**  Name | **BloodGroup**  **Id**  Name | **Religion**  **Id**  Name | **AccessControlList**  EmployeeId  CardNo  Password  Type  LogHistory |