

```
pragma solidity ^0.8.0;
```

```
contract EmployeeData {
```

```
    struct Employee {
```

```
        uint id;
```

```
        string name;
```

```
        uint age;
```

```
        string position;
```

```
        uint salary;
```

```
    }
```

```
    Employee[] public employees;
```

```
    mapping(uint => uint) private employeeIndex;
```

```
    fallback() external payable {}
```

```
    function addEmployee(uint _id, string memory _name, uint _age, string memory _position, uint _salary) public {
```

```
        require(employeeIndex[_id] == 0, "Employee ID already exists");
```

```
        employees.push(Employee(_id, _name, _age, _position, _salary));
```

```
        employeeIndex[_id] = employees.length;
```

```
    }
```

```
    function getEmployee(uint _id) public view returns (Employee memory) {
```

```
        require(employeeIndex[_id] > 0, "Employee does not exist");
```

```
        return employees[employeeIndex[_id] - 1];
```

```
    }
```

```
    function updateEmployee(uint _id, string memory _name, uint _age, string memory _position, uint _salary) public {
```

```
        require(employeeIndex[_id] > 0, "Employee does not exist");
```

```
uint index = employeeIndex[_id] - 1;
employees[index].name = _name;
employees[index].age = _age;
employees[index].position = _position;
employees[index].salary = _salary;
}
```

```
function deleteEmployee(uint _id) public {
    require(employeeIndex[_id] > 0, "Employee does not exist");
    uint index = employeeIndex[_id] - 1;
    employees[index] = employees[employees.length - 1];
    employeeIndex[employees[index].id] = index + 1;
    employees.pop();
    delete employeeIndex[_id];
}
```

```
function getTotalEmployees() public view returns (uint) {
    return employees.length;
}
}
```