DnA Phase 4 Project

Team Number 5

Akshit Sharma (2021101029)
Yash Adivarekar (2021101008)
Shivaye Jain (2021101119)

1. **Find Employees Currently Working on a Car on Conveyer Belt :-**
   This is a query which finds all attributes of workers currently available in the database.

2. **Find model with maximum units in storage :-**
   This is a query which finds the car model with the maximum number of cars on storage from the database.

3. **Find all workers with name starting with a given letter :-**
   User is asked to provide a string. This query then lists all attributes of all workers who have the characters in their first few characters in their name same as the characters provided by the user.

4. **Get details about all cars with progress >= 50% :-**
   This is an analysis query. This query provides all attributes of cars on conveyor belts who have their progress greater than or equal to 50%.

5. **Get details of car in storage with waiting time more than avg waiting time :-**

   This is an analysis query which shows all the attributes of the cars in storage who have been in storage for more time than the average waiting time of all cars in storage.

6. **Update progress of a Car On Conveyer Belt :-**

   This is an update query. It asks the user to specify the VIN of the car whose progress has to be updated and the new progress for that car. If the progress of the car is 100% then the car is shifted from the cars_on_conveyer_belts table to the cars_in_storage table and all tuples with a foreign keys referencing that car VIN are removed from their respective tables.

7. **Insert a new Car Model :-**

   This is an insertion query. This allows the user to insert information related to a particular car model into the database. The user is asked to enter Model_Name, Car_Type, Count_in_storage, Plastic_req, Steel_req, Leather_req, Cloth_req. This information is then stored as a new tuple in Car_Models table.

8. **Put a car into production :-**

   This is an insertion query. This query allows the user to insert information about a new car that has been just brought into the production conveyer belt into the database. The user is asked to input the new VIN number of the new car,

Belt_No on which the new car is being produced, W_No (Worker Number) of the worker assigned to the production of the car, Color (multiple) of the new car. The progress of the newly added car is set to 0% by default. The new data is added to the tables cars_on_conveyer_belt, workers_on_cars_on_conveyer_belt, colors_of_cars_on_conveyer_belt as new tuples.

9. Change working status of a robot :-

This is an update query. This query allows the user to update the working status of the robot. The user is asked to input the VIN number of the car on which the robot is working, the work code of the robot and the new status of the robot. The query changes the status of that particular robot working on the specified car.

10. Increase number of suppliers of a resource :-

This query allows the user to change the number of suppliers for a particular resource in the database. The user is asked to input the resource for which the update has to be performed and the new number of suppliers for the database.

11. Increase Supply of a resource :-

This query allows the user to change the available amount of a particular resource in the database. The user is asked to input the name of the resource whose available supply has

to be updated and the new value of the available supply of that resource.

12. Find Load on each Conveyer Belt :-

This is an analysis query. This query shows the load on each conveyer belt in a graphical representation (bar graph using pyplotlib).

13. To quit :-

Exits the database interface.