Write Relational Algebra expressions for following queries.

Question 1:

ALBUMS(AlbumNo, AlbumName, ProducedBy, Year)

SONGS(SonsNo, SongsStart, Duration, AlbumNo)

SUNGBY(ArtistId, SongNo)

ARTIST(ArtistId, ArtistName)

1. Find the duration of the song with SongNo = 123:
2. Find the names of all artists who have sung a song in the album named "Thriller"
3. Find the names of all artists who have not sung any song
4. Find the names of all songs sung by the artist "Beyonce":
5. Find the names of all albums that have at least one song with a duration greater than 5 minutes:

Question 2:

FACULTY (FacultyCode, FacultyName)

SUBJECT (SubjectCode,SubjectName,MaxMark,FacultyCode)

STUDENT(StudentCode,StudentName,DOB,StudentsBranch(CS/EC/EE/ME), AdmissionDate)

MARK(StudentCode, SubjectCode, Mark)

1. To get the names of all the faculties.
2. List the name of students enrolled for "CE"
3. To get the names and maximum marks of all the subjects taught "Alice"
4. To get the name of the faculty member who teaches "Fluid Mechanics"
5. To get the list of students who scored more than a 60 mark in DBMS

Question 3:

CUSTOMER(customer_id, customer_name, mobileno, dob, account_id)

ACCOUNT(account_id, account_type, account_balance, branch_id)

BRANCH(branch_id, branch_name, assets, branch_address)

TRANSACTION(transaction_id, amount, customer_id, account_id)

1. Retrieve the transaction ID, amount, and account ID for all transactions greater than 1000
2. Retrieve the customer ID and account ID for all accounts with a balance less than 500
3. Retrieve the customer name and total amount transacted for each customer
4. Retrieve the account balance and branch address for each account owned by a customer whose name is "Alice"
5. Retrieve the branch name and total assets for each branch that has at least one account