T1-tsa-ra.docx

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Comments for your marker:

Write the **relational algebra operations** for each of Task 1 queries below (your answer must show an *understanding of query efficiency*).

List of symbols for copying/pasting as you enter your answers below:
project: π, select: σ, join: ⋈, intersect: ∩, union: ∪, minus: -

1(a)

R = ((π town_id TOWN) – (π town_id POINT_OF_INTEREST)) ⋈ (π town_id, town_name, town_state TOWN)

1(b)

POI_TYPE_ID = π poi_type_id (σ poi_type_descr = 'Nature and Wildlife' POI_TYPE)

R = π poi_id, poi_name, poi_street_address, poi_description (POI_TYPE_ID ⋈ (π poi_type_id, poi_id, poi_name, poi_street_address, poi_description (σ poi_review_rating > 3.0 POINT_OF_INTEREST)))

1(c)

BROOME_ID = π town_id (σ town_name = 'Broome', town_lat = -17.9644, town_long = 122.2304 TOWN)

R1 = π poi_id, poi_name ((π poi_id, town_id, poi_name POINT_OF_INTEREST) ⋈ BROOME_ID)

R2 = (π member_id, member_gname MEMBER) ⋈ (π member_id, review_date_time, review_comment, review_rating, poi_id REVIEW)

R = R1 ⋈ R2