

1. Write your name below.
  
2. Provide a SQL script that creates tables **Accts**(**id**, **name**, **address**) and **Images**(**id**, **acct**, **size**, **loc**) for storing information on images (e.g., JPEG files) and the accounts to which they belong. Use suitable key and not-null constraints, and a constraint to ensure that image sizes are in the range  $(0, 1000]$ . Add statements to ensure that only accounts that own at least one image appear in **Accts** and, conversely, only images associated with a known account appear in **Images**. Also add statements to ensure that the total size of all images for any account is at most  $10^6$ . Finally, include statements to insert one account tuple and one image tuple.

3. Provide triggers that are equivalent to the constraint *c1*:

```
alter table R add constraint c1 foreign key (A, B)
references S(D, B);
```

4. Explain how the aggregate image size constraint of Question 2 may be enforced at the DBMS-level (not application level) by a database system that does not support SQL assertions, but that does support triggers.