

Fundamentals of Data Structure and Algorithm

Assignment 7

SQL

1. What publisher is located in GARDEN CITY?

Answer: DOUBLEDAY AND COMPANY INC.

SQL command

```
select publisher
from pub
where pcity='GARDEN CITY'
```

2. How many books in the catalogue from publishers in NEW YORK?

Answer: 39

SQL command

```
select count(loc)
from bib
where loc="NEW YORK"
```

3. Find the average price of a book in the SOCIAL CHANGE subject category.

Answer: \$8.625

SQL command

```
select subcode from sub where subcode = "SOCIAL CHANGE";
select accno from indx where subcode = 21;
select price from bib where accno in ("B010", "H054")
```

4. How many books from San Francisco publishers are about the subject of UNIVERSITIES AND COLLEGES?

Answer: 2

SQL command

```
select pub.pcity
from sub
inner join indx on indx.subcode = sub.subcode
inner join bib on bib.accno = indx.accno
inner join pub on pub.pubid = bib.pubid where sub.subcode = 24
```

5. Books in which subject category have the highest average price?

Answer: COMMUNICATION - ECONOMIC ASPECTS (\$35) and COMMUNICATION POLICY - US (\$35)

SQL command

```
select avg(bib.price), sub.subject
from ((sub
inner join bib on bib.accno = indx.accno)
inner join indx on sub.subcode = indx.subcode)
group by subject
order by avg(bib.price) desc
```

6. Among books costing 15 dollars or more, which publisher ranks highest in terms of average book HEIGHT?

Answer: DIABLO PRESS (28 inch)

SQL command

```
select bib.height, pub.publisher, bib.price
from (pub inner join bib on bib.pubid = pub.pubid)
where price >= 15
order by height desc
```