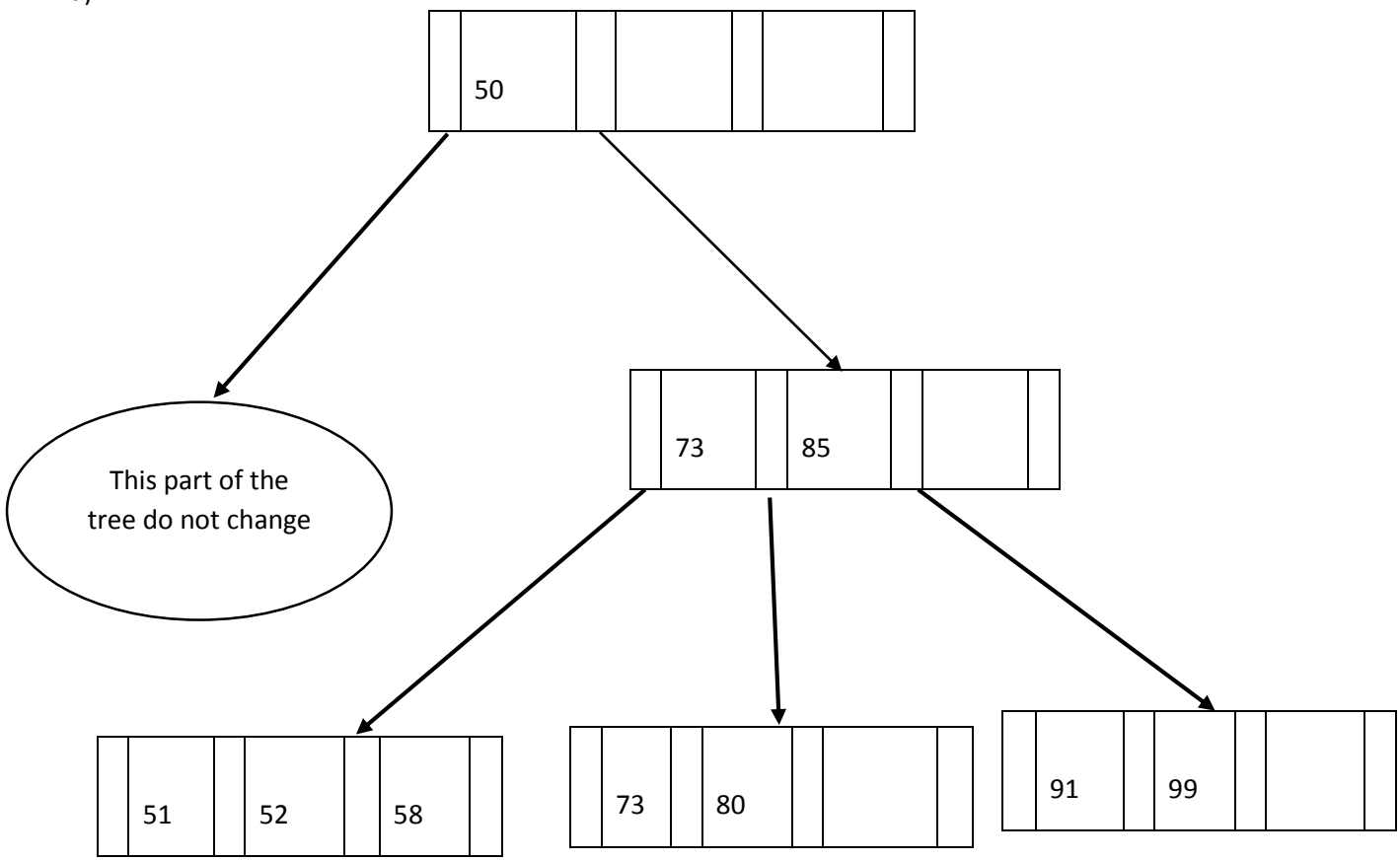
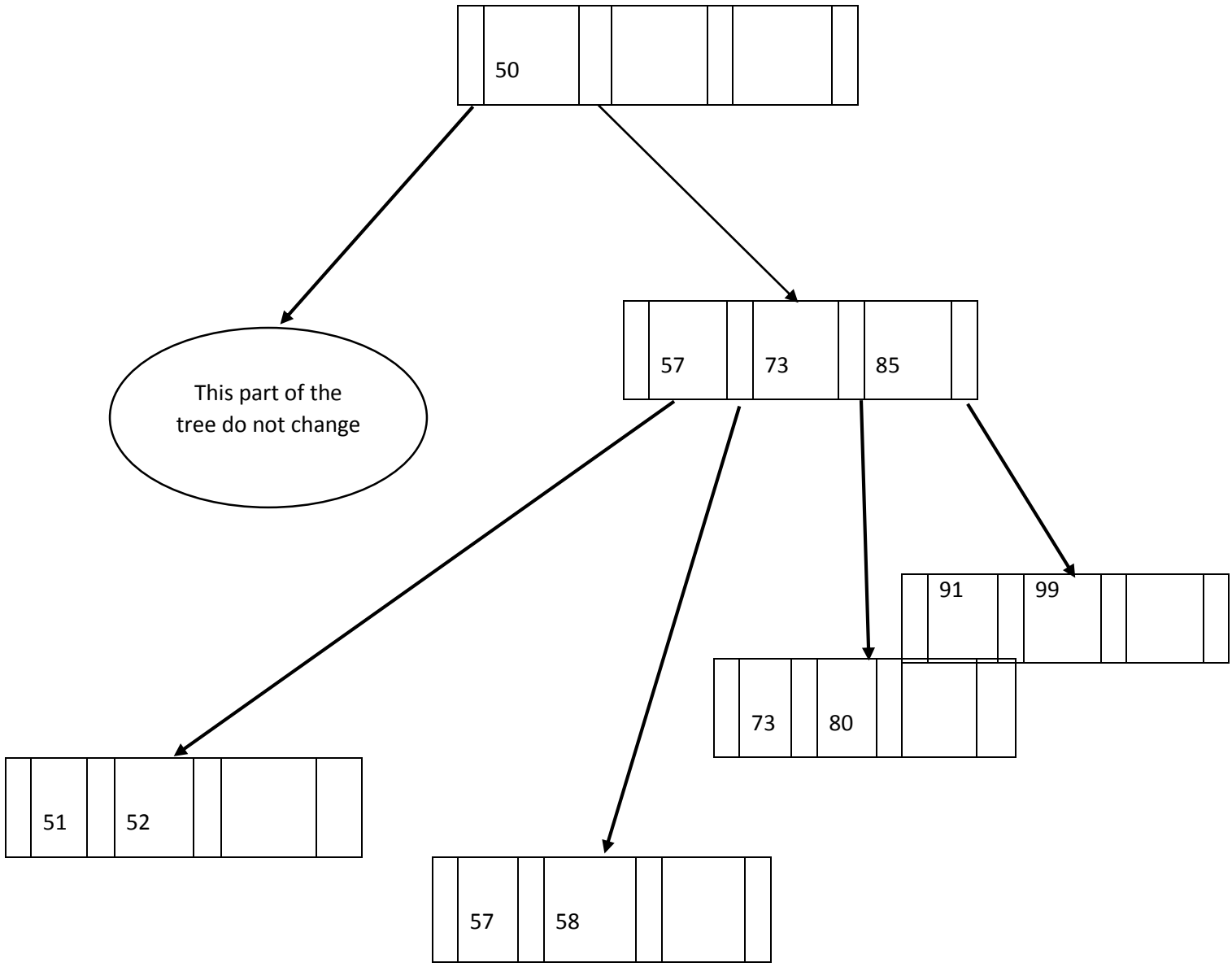
DATABASE SYSTEMS

Home Work Assignment-II

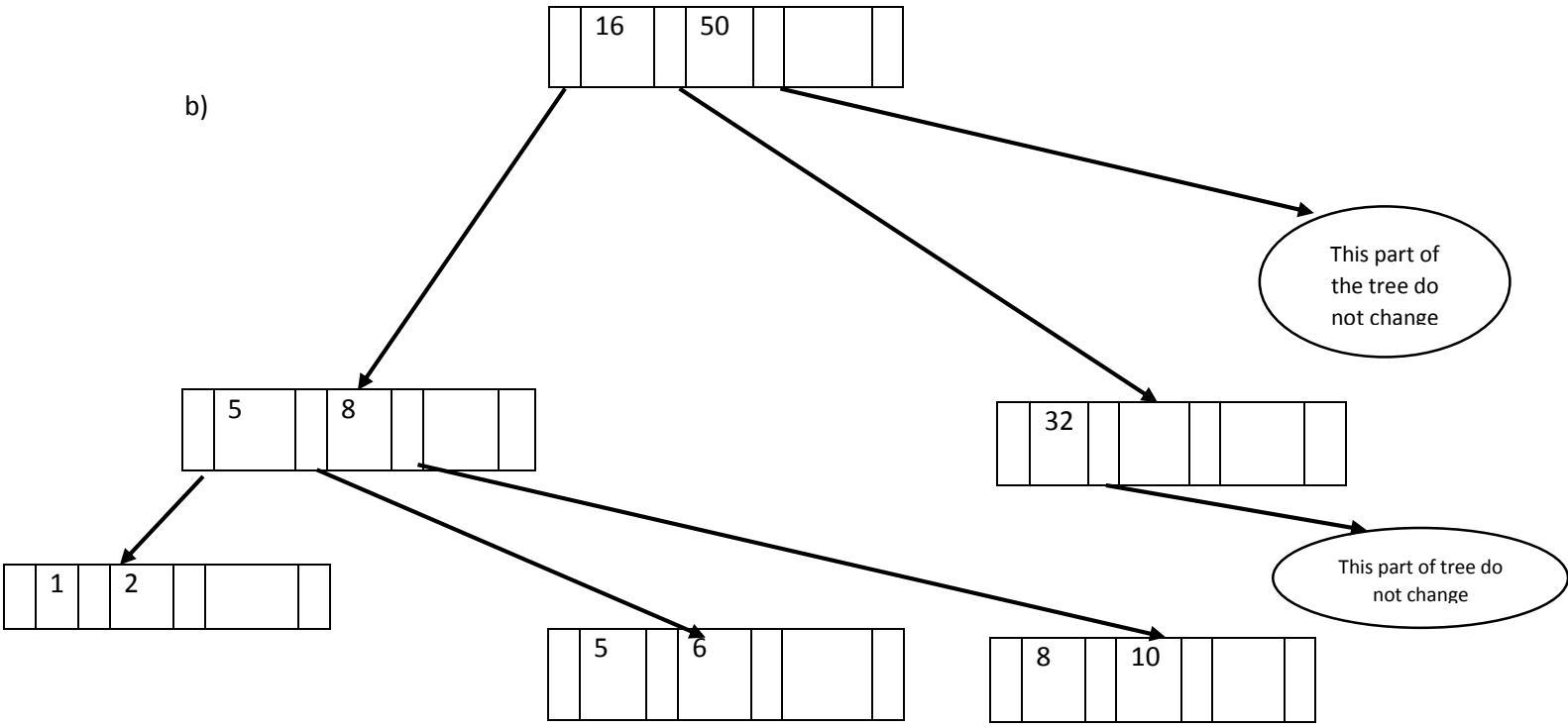
Problem 1:

a)

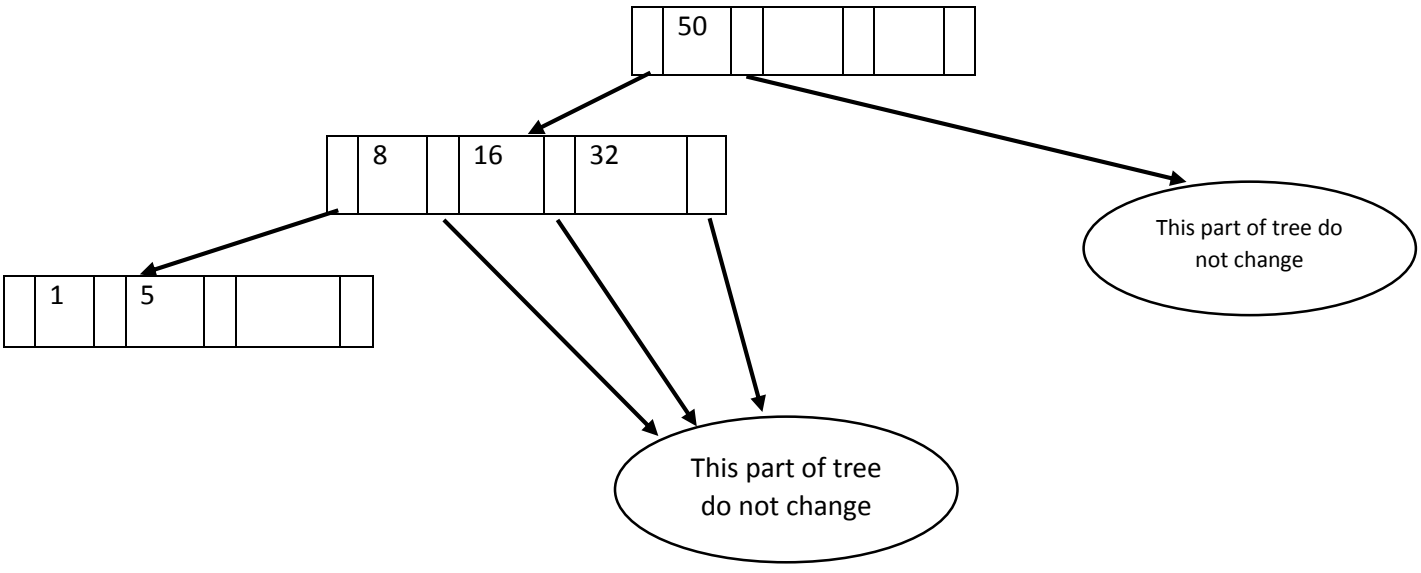



50
This part of the
tree do not change
57
73
85
91
99
73
80
51
52
57
58

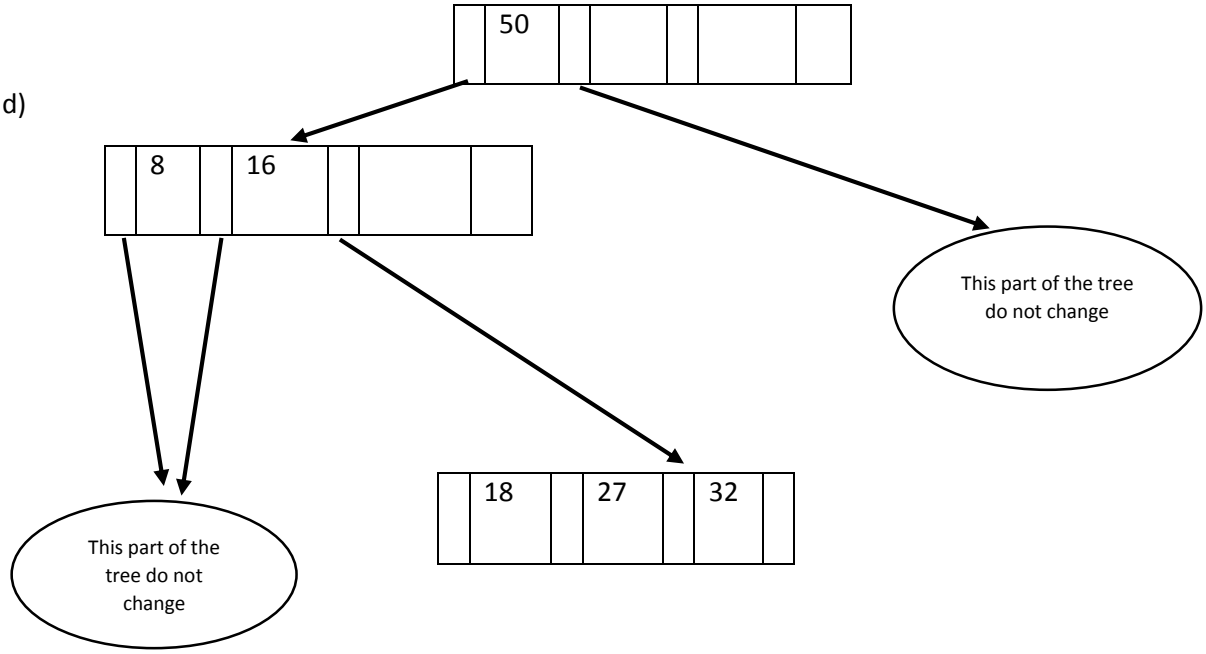
b)


16
50
This part of the tree do not change
5
8
32
This part of tree do not change
1
2
5
6
8
10

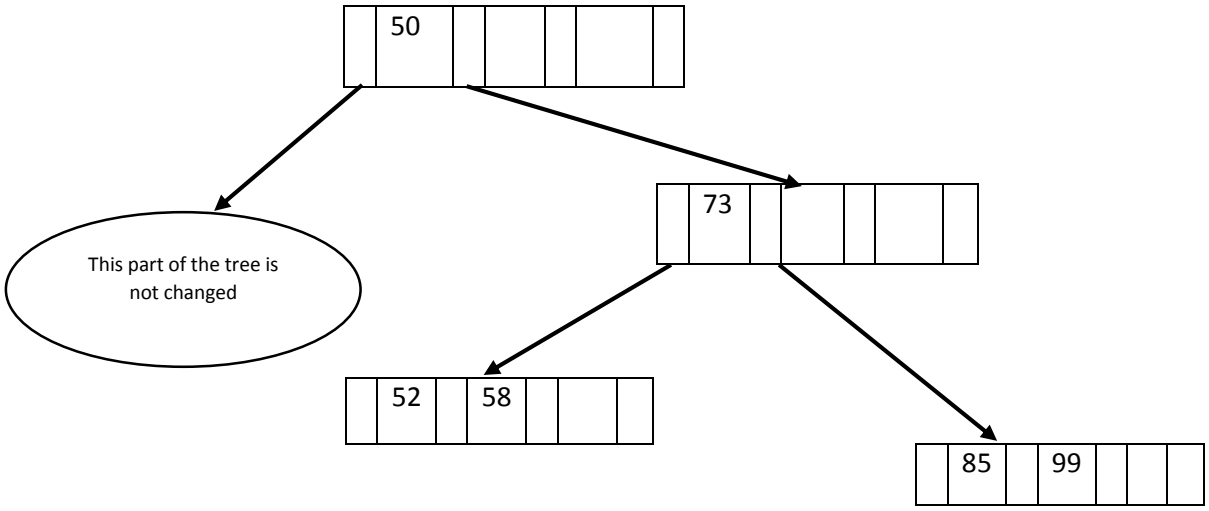
c)


50
8
16
32
This part of tree do not change
1
5
This part of tree do not change

d)

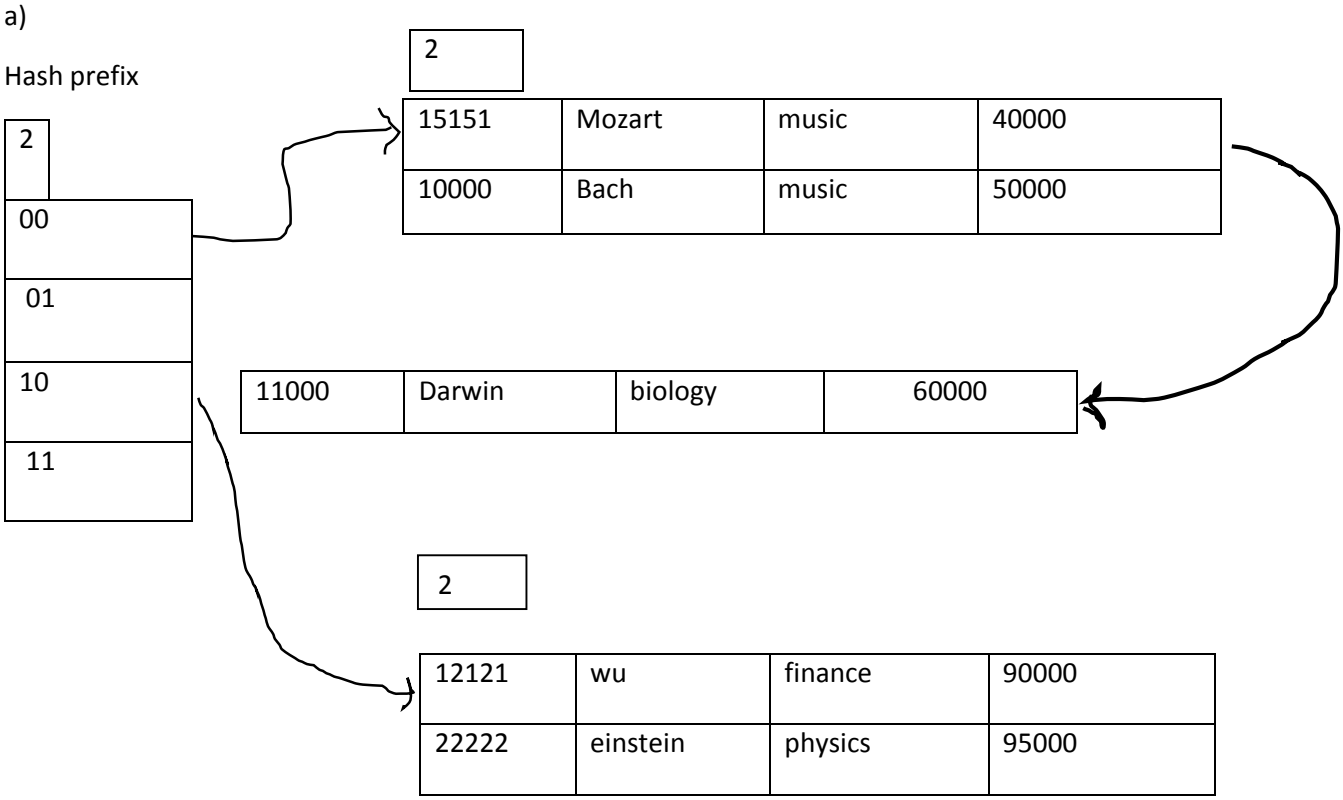

50
8
16
This part of the tree do not change
18
27
32
This part of the tree do not change

e)

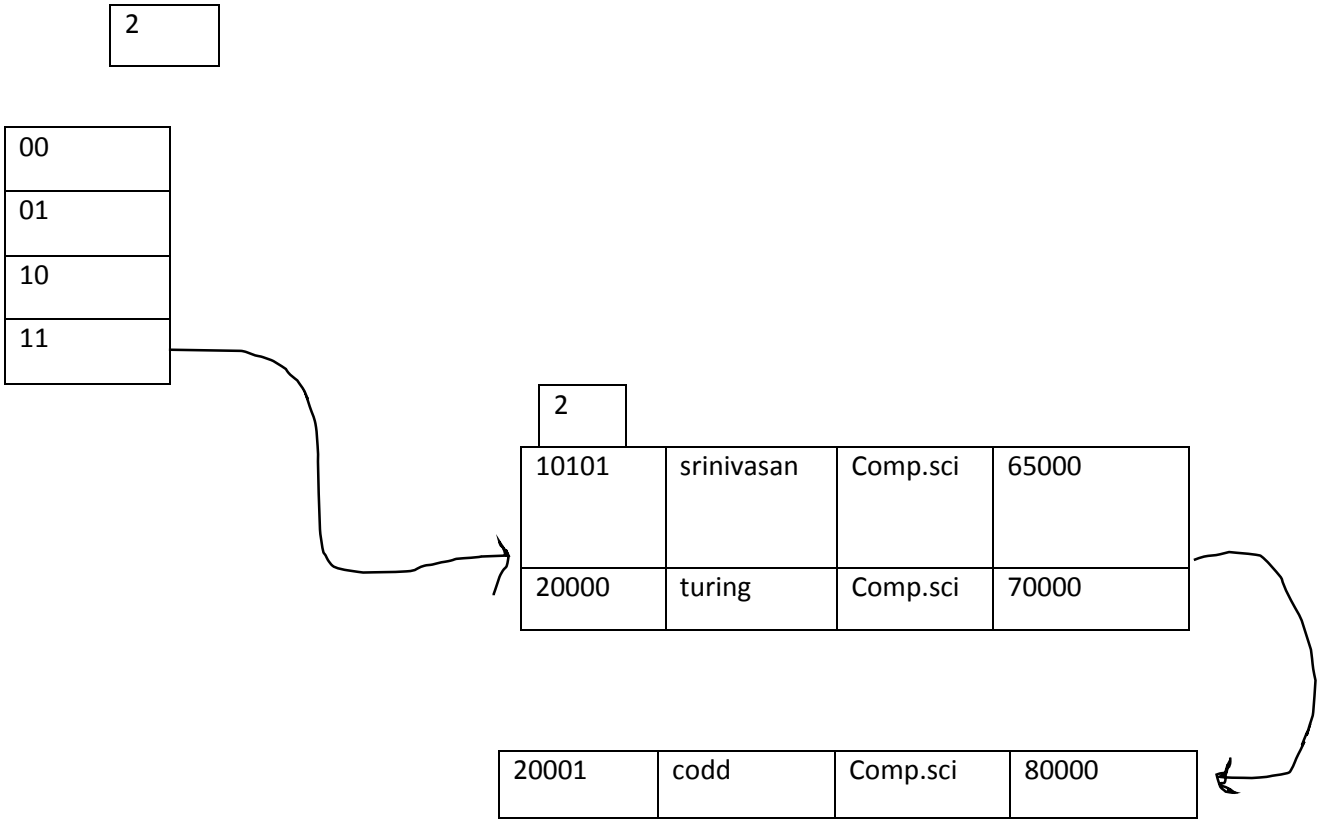

50
73
This part of the tree is not changed
52
58
85
99

Problem 2:

a)


Hash prefix
2
00
01
10
11
2
15151
Mozart
music
40000
10000
Bach
music
50000
11000
Darwin
biology
60000
2
12121
wu
finance
90000
22222
einstein
physics
95000

b) Hash prefix



Problem 3:

a) Create table branch(
branch_name varchar(255),
branch_city varchar(255),
assets float(255,5),
primary key(branch_name));

Create table customer(
Customer_id int,
Customer_name varchar(255) NOT NULL,
Customer_street varchar(255),

```
Customer_city      varchar(255),
Primary key(customer_id));

 Create table account(
account_number    varchar(255),
branch_name       varchar(255),
balance           float(255,5),
primary key(account_number));

Create  table depositor(
Customer_id int,
Account_number varchar(255),
Primary key(customer_id,account number)
Foreign key(customer_id)references customer(customer_id));
```

b)

```
select c.customer_city from (customer c
inner.join depositor d on c.customer id= d.customer id)
inner join  account a on d.account number=a.account
where a.balance>300000;
```