Bohan Feng Homework06

1

python

```python
def adder(*argv):
    sum = 0
    for value in argv:
        sum += value
    return sum

print("Sum 1 is", adder(1,2,3,4,5,6))
print("Sum 2 is", adder(1,5))
print("Sum 3 is", adder())
```

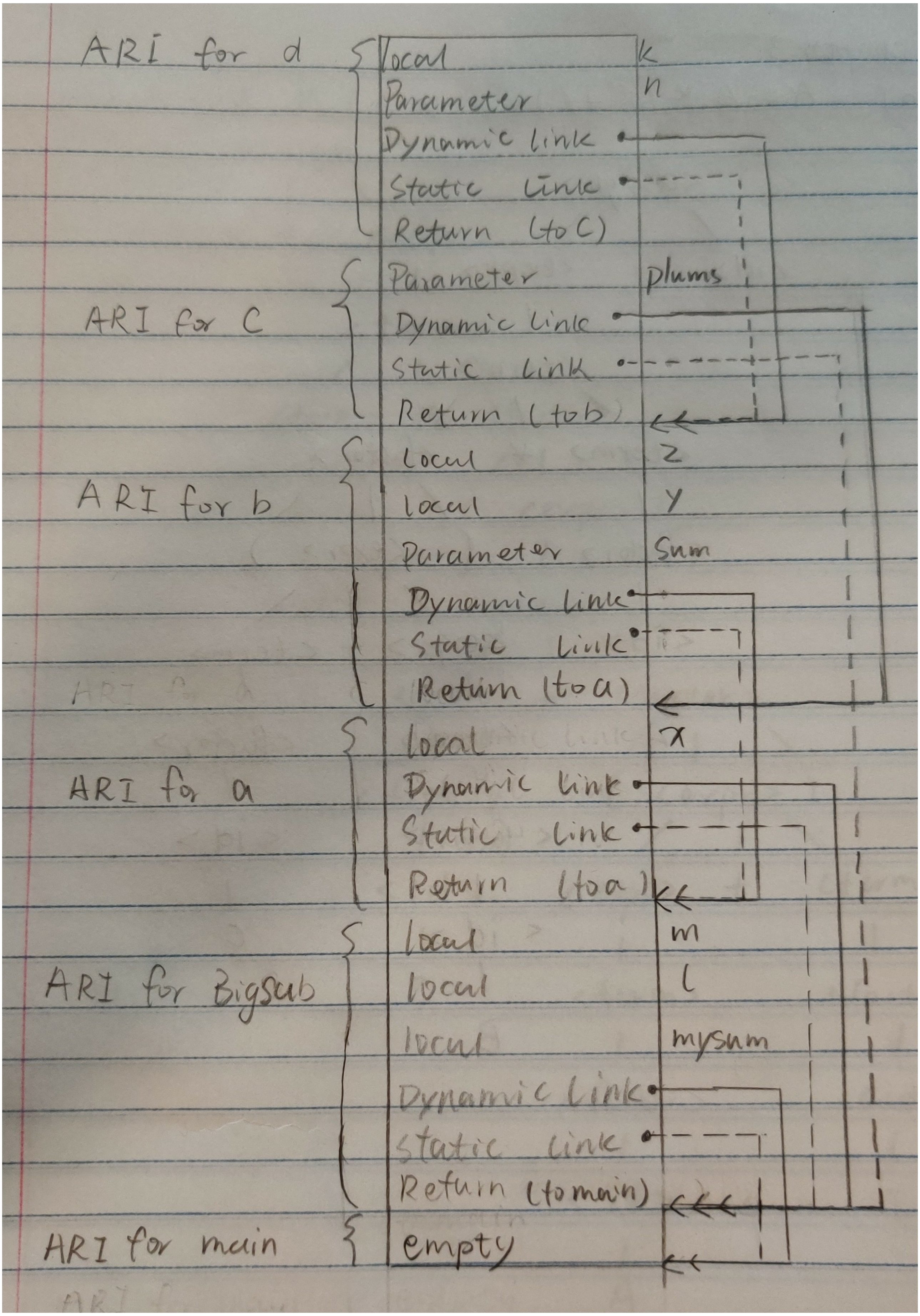
Java

```java
public class hw6 {

    public static int adder(int ...args)
    {
        int sum = 0;

        for (int i : args){
            sum += i;
        }

        return sum;
    }
    public static void main(String [] args)
    {
        System.out.println("Sum 1 is " + adder(1,2,3,4,5,6));
        System.out.println("Sum 2 is " + adder(1,5));
        System.out.println("Sum 3 is " + adder());
    }
}
```

C#

```
using System;

namespace hw6 {
    class hw6 {
        public static int Adder(params int[] args)
        {
            int sum = 0;

            for (int i = 0; i < args.Length; i++){
                sum += args[i];
            }

            return sum;
        }

        public static int Main(String [] args)
        {
            Console.WriteLine("Sum 1 is {0}", Adder(1,2,3,4,5,6));
            Console.WriteLine("Sum 2 is {0}", Adder(1,5));
            Console.WriteLine("Sum 3 is {0}", Adder());

            return 0;
        }
    }
}
```

2


ARI for d
Local
k
Parameter
n
Dynamic link
Static link
Return (to C)
ARI for C
Parameter
plums
Dynamic link
Static link
Return (to b)
ARI for b
Local
z
local
y
Parameter
Sum
Dynamic link
Static link
Return (to a)
ARI for a
local
x
Dynamic link
Static link
Return (to a)
ARI for Bigsub
Local
m
local
l
local
mysum
Dynamic link
Static link
Return (to main)
ARI for main
empty

a)

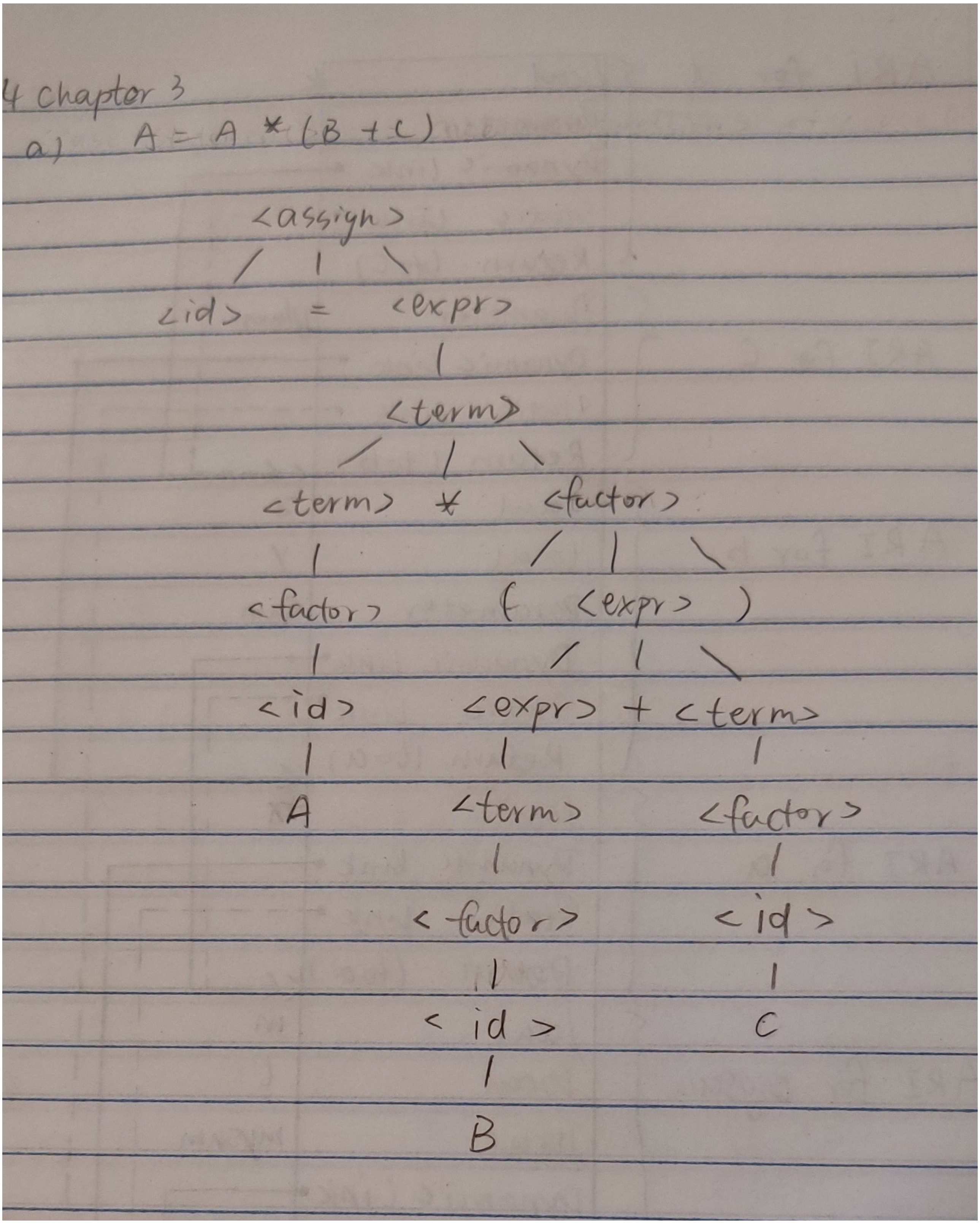
```
<case statement> ::= case <expression> of <case list element> end
::= <simple expression> of <case list element> end
::= case <term> of <case list element> end
::= case <factor> of <case list element> end
::= case <unsigned contant> of <case list element> end
::= case <unsigned number> of <case list element> end
::= case <unsigned integer> of <case list element> end
::= case <digit> of <case list element> end
::= case <digit> of <empty> end
```

b)

```
<program> ::= program <identifier>; <block>
::= program <letter>; <block>
::= program <letter>; <label declaration part> <contant definition part> <type
definition part> <variable declaration part>
::= program <letter>; <empty> <contant definition part> <type definition part>
<variable declaration part>
::= program <letter>; <empty> <empty> <type definition part> <variable
declaration part>
::= program <letter>; <empty> <empty> <empty> <variable declaration part>
::= program <letter>; <empty> <empty> <empty> <empty>
```

4

a)

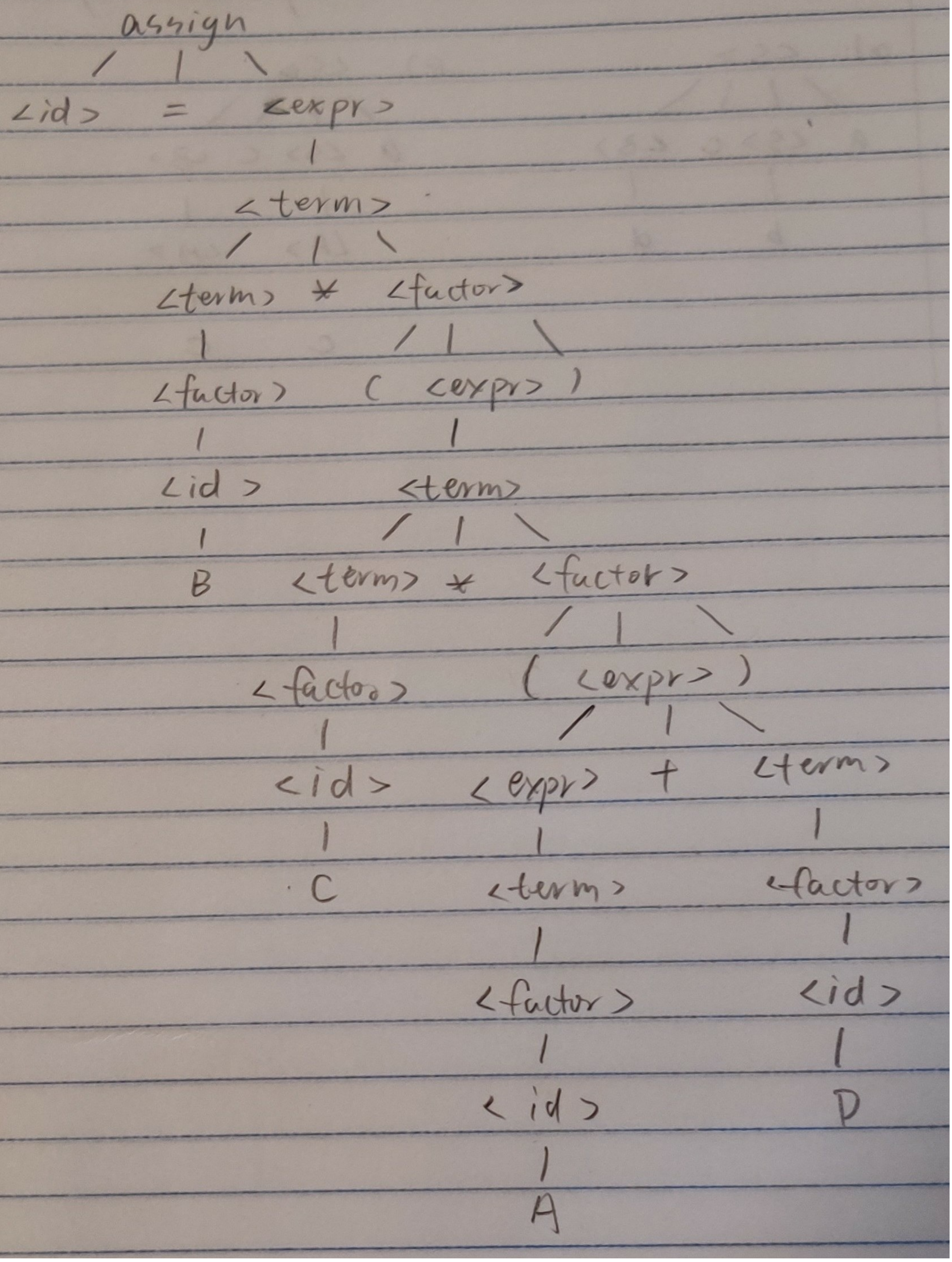


4 chapter 3

a) A = A * (B + C)

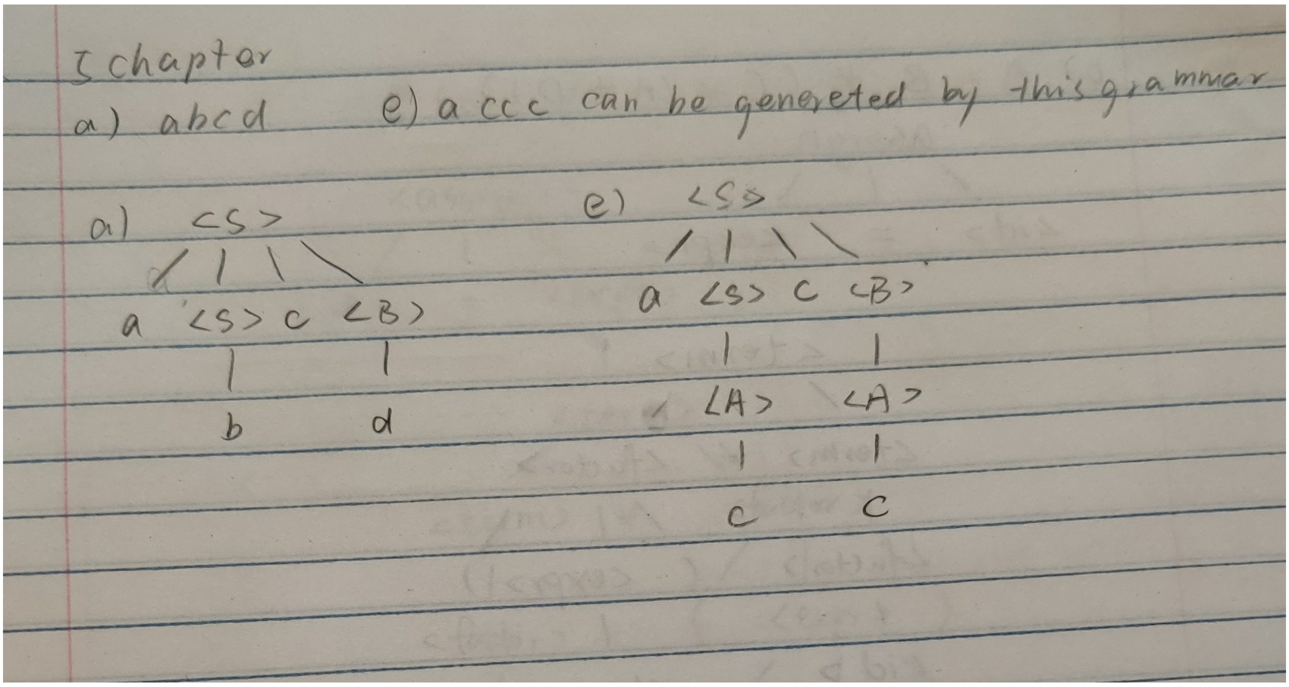
b)

b) A = B * (C * (A + D))



3 chapter

a) abcd e) a ccc can be genereted by this grammar


a) <S>
a <S> c <B>
b d
e) <S>
a <S> c <B>
<A> <A>
c c