Homework

7.4

7.15

- Deadline: 5.11 (Monday)

Chapter 7 Runtime Environments

- 7.4 Draw the stack of activation records for the following Pascal program, showing the control and access links, after the second call to procedure **c**. Describe how the variable **x** is accessed from within **c**.

```
procedure a;
var x: integer;

    procedure b;
        procedure c;
        begin
            begin
                x := 2;
                b;
            end;
        begin (* b *)
            c;
        end;

    begin (* a *)
        b;
    end;

    begin (* main *)
        a;
    end;
```

7.15 Give the output of the following program (written in C syntax) using the four parameter passing methods discussed in Section 7.5:

```c
#include <stdio.h>
int i=0;

void p(int x, int y)
{ x += 1;
  i += 1;
  y += 1;
}


main()
{ int a[2]={1,1};
  p(a[i],a[i]);
  printf("%d %d\n",a[0],a[1]);
  return 0;
}
```