

CPSC 231: Fall 2007 (Review for L02)

Part I: Written

1. For the linked list implementation of the “investors.p” program that I went over this term, write a display procedure that will show the nodes of the list in their original order using recursion rather than iteration.

```
procedure displayRec (temp : NodePointer);  
begin  
  if (temp <> NIL) then  
    begin  
      writeln('First name: ':20, temp^.data.firstName);  
      writeln('Last Name: ':20, temp^.data.lastName);  
      writeln('Income $':20, temp^.data.income:0:2);  
      writeln('Email: ':20, temp^.data.email);  
      writeln;  
      displayRec(temp^.nextPointer);  
    end;  
  end;
```

2. What is the output of the following program?

```
a b  
A B  
A B  
# *  
A *
```

3. In the space provided below you are to indicate what will be the output of the following program.

```
111  
222  
333
```

4.

```
procedure showPass (lectureSection : Lecture);  
var  
  i : integer;  
begin  
  for i := 1 to CLASSSIZE do  
    begin  
      if (lectureSection[i].gpa > 0) then  
        begin  
          writeln;  
          writeln(lectureSection[i].firstName);  
          writeln(lectureSection[i].lastName);  
          writeln(lectureSection[i].studentID);  
          writeln(lectureSection[i].gpa);  
          writeln;  
        end;  
      end;  
    writeln;  
  end;
```

Part II: Multiple choice

- 5. C
- 6. E
- 7. D
- 8. A
- 9. B
- 10. E
- 11. C