CPSC 231, Midterm Review: Spring 2004

Short answer

In the space provided below trace the output of the following program.

```
program practiceFun (output);

var
   var1 : integer;
   var2 : integer;

procedure proc  (var3 : integer; var var4 : integer);
var
   var2 :  integer;
begin
   var2 := 10;
   var3 := 20;
   var4 := 30;
   writeln('3:', var2);
   writeln('4:', var3);
   writeln('5:', var4);
end;

function fun (var2 : integer):integer;
begin
   fun := var2 + 1;
end;

begin
   var var2 :  integer;

   var1  := 1;
   var2  := 2;
   writeln('1:', var1);
   writeln('2:', var2);
   proc(var1, var2);
   writeln('6:', var1);
   writeln('7:', var2);

   begin
     var var2 : integer;

     var2  := 0;
     var2  := fun(var2);
     writeln('8:', var1);
     writeln('9:', var2);
   end;

   writeln('10:', var1);
   writeln('11:', var2);
end.
```

<< Put your answer here >>

<< End of answer space >>

Multiple choice

1. How does the Turing test work?
   a. Because is important to consider the human and the technological perspective when developing software the Turing test requires that the developer visit each potential user onsite.
   b. The software program asks a test participant a series of questions, if the questions are deemed as appropriate then an artificial intelligence has been created.
   c. A test participant asks another person a series of questions in order to determine how people solve problems (thus employing the top down approach to creating an artificial intelligence).
   d. A test participant asks another person and a software program software program a series of question. If from the answers given, the test participant cannot tell the difference between the person and the program then an artificial intelligence has been created.
   e. None of the above.

2. What would be a reasonable amount of hard drive space that you would expect for a new computer?
   a. 1 KB
   b. 1 MB
   c. 120 MB
   d. 80 GB
   e. 100 TB

3. What will be the output the following program?

```
program decision (output);
begin
   var x : integer;
   x := 1;
   if (x < 1) then
      write('x under 1;');
   if (x < 2) then
      write('x under 2;');
   if (x < 3) then
      write('x under 3;');
   if (x < 4) then
      write('x under 4;');
end.
```

   a. x under 1
   b. x under 2
   c. x under 2;x under 3;x under 4;
   d. x under 1; x under 2;x under 3;x under 4;
   e. None of the above

JT: Liked the practice exam, then you'll love the real thing!