Problem C11. (Unified Computers and programming)

1. What is the output of the code fragment in Figure 1?

2. Write an Ada95 program to implement the Euler's 2nd order integration method. Turn in a hard copy of your algorithm and code listing and an electronic copy of your code.

3. Write an Ada95 program to accept 10 numbers from the user and find the average of the numbers. Implement your code using the WHILE – LOOP construct. Turn in a hard copy of your algorithm and code listing, and an electronic copy of your code.

   Hint: Compute the sum every time the user enters a number and the average outside the loop.

```
Count := 1;
for I in 1 .. 10 loop
   if I MOD 2 = 0 then
      for J in 1 .. 10 loop
         Count:= Count + 2;
      end loop;
   else
      for J in 1 .. 5 loop
         Count := Count - 1;
      end loop;
   end if;
end loop;
```

Figure 1. Code Fragment