Part X
Postlude
“True peace is not merely the absence of tension; it is the presence of justice”

- Martin Luther King, Jr.
“It is more blessed to give than to receive.”

Test in C

Important Notice
Most of the teachers ask the “undefined” patterns as questions. As they get certain output for their undefined patterns or programs, they think that their question is right. But it is not so. “Undefined” is not an exception to Turbo C. So anything undefined means, it applies to both ANSI C and Turbo C.

76.1 ANSI C

1. Which are the valid C identifiers among the following?
   (i) a
   (ii) a_
   (iii) _a
   (iv) _
   (v) __
   (vi) _1
   (vii) 1_
   (viii) _1
   (ix) $s
   (x) a-z

2. Comment on the validity of following C code.
   ```c
   int _;
   _ = 10;
   --_; 
   ```

3. Comment on the following C code.
   ```c
   int i = 7;
   printf( "%d", ++i * ++i );
   ```

4. Comment on the following C code.
   ```c
   int *ptr, a;
   ptr = malloc( 5 );
   ptr = & a;
   ```

5. What is `sizeof( ‘A’ )`? Why?

6. Which is the fastest datatype in C?
7. Which are all the faster operators in C?

   (Ans: It depends upon the implementations. In most of the implementations, bitwise operators, especially shift)

8. Which is the easiest way to avoid memory leak?

76.2 Turbo C / DOS Programming

1. What would be the output of the following code?

   ```c
   #pragma -ms
   char *ptr;
   printf( "%d \n", sizeof(ptr) );
   ```

2. What would be the output of the following code?

   ```c
   #pragma -mh
   char *ptr;
   printf( "%d \n", sizeof(ptr) );
   ```

76.3 Windows

1. Only one directory of Windows can hold multiple files with same name. What is the name of that directory?

2. The files we try to store in `C:\TEMP>` get disappeared when we reboot our system. Why?