4.7.POINTER TO FUNCTION

In C, like normal data pointers (int *, char *, etc), we can have pointers to functions. Following is a simple example that shows declaration and function call using function pointer.

Example program

```c
#include <stdio.h>
// A normal function with an int parameter and void return type
void fun(int a)
{
printf("Value of a is %d\n", a);
}
int main()
{
    void (*fun_ptr)(int);        // fun_ptr is a pointer to function fun()
    fun_ptr = &fun;
    (*fun_ptr)(10);    // Invoking fun() using fun_ptr
    return 0;
}
```

Output

Value of a is 10

Following are some interesting facts about function pointers.

 1) Unlike normal pointers, a function pointer points to code, not data. Typically a function pointer stores the start of executable code.

2) Unlike normal pointers, we do not allocate de-allocate memory using function pointers.

 3) A function's name can also be used to get functions' address