

Question 1:

Suppose we are going to create a new file named “**vuSample.txt**” on a hard disk using the Windows **CreateFile()** API. Write the signature of this API by setting the parameters as:

1. The file is created for read/write both.

`FILE_ATTRIBUTES_NORMAL`

2. The file is not required to be created for sharing.

`dwShareMode: 0` Signature That File will Not Be Shared

3. Security attributes should be default.

`IpsecurityAttributes`

4. If the same name filename exists, then it is overwritten by the new file.

```
ofstream myfile ("vuSample.txt");  
myfile << "Your VU ID.\n";  
myfile << "Your VU ID.\n";  
myfile.close();
```

5. Set all other parameters as NULL.

`array_create(NULL,10);`

Question 2:

Write a C++ program for getting the last error code generated during execution of a process, convert this code into a user-understandable language format using the Windows **FormatMessage()** API and display the message along with the error code.

Solution

CODE:

```
#include <windows.h>
#include <everything.h>
#include <strsafe.h>
```

```
void ErrorExit(LPTSTR lpszFunction)
{
```

```
    LPVOID lpMsgBuf;
    LPVOID lpDisplayBuf;
    DWORD dw = GetLastError();
```

```
    FormatMessage(
        FORMAT_MESSAGE_ALLOCATE_BUFFER |
        FORMAT_MESSAGE_FROM_SYSTEM |
        FORMAT_MESSAGE_IGNORE_INSERTS,
        NULL,
        dw,
        MAKELANGID(LANG_NEUTRAL, SUBLANG_DEFAULT),
        (LPTSTR) &lpMsgBuf,
        0, NULL );
```

```

    lpDisplayBuf = (LPVOID)LocalAlloc(LMEM_ZEROINIT,
        (lstrlen((LPCTSTR)lpMsgBuf) + lstrlen((LPCTSTR)lpzFunction) +
40) * sizeof(TCHAR));
    StringCchPrintf((LPTSTR)lpDisplayBuf,
        LocalSize(lpDisplayBuf) / sizeof(TCHAR),
        TEXT("%s failed with error %d: %s"),
        lpzFunction, dw, lpMsgBuf);
    MessageBox(NULL, (LPCTSTR)lpDisplayBuf, TEXT("Error"),
MB_OK);

    LocalFree(lpMsgBuf);
    LocalFree(lpDisplayBuf);
    ExitProcess(dw);
}

```

```

void main()
{

    if(!GetProcessId(NULL))
        ErrorExit(TEXT("GetProcessId"));
}

```