

ENG236 Computer Programming

Quiz 16 (2 February 2010)

Instructions: open book, 25 minutes (240 marks bonus)

What is printed on the screen for the following programs?

1. (40 marks)

```
#include <fstream>
#include <iostream>
using namespace std;

int main()
{
    char ch;

    ofstream test1file("test1");
    test1file << "1 2 3 4 5 6 7 8 9 10\n";
    test1file << "11 12 13 14 15 16 17 18 19 20\n";
    test1file.close();

    ifstream tin("test1");
    cout << "The file's final content is:\n";
    while (tin.get(ch))
        cout << ch;
    tin.close();

    return 0;
}
```

2. (40 marks)

```
#include <fstream>
#include <iostream>
using namespace std;

int main()
{
    char ch;

    ofstream test1file("test1");
    test1file << "1 2 3 4 5 6 7 8 9 10\n";
    test1file << "11 12 13 14 15 16 17 18 19 20\n";
    test1file.close();

    ifstream tin("test1");
    tin.seekg(15);
    cout << "The file's final content is:\n";
    while (tin.get(ch))
        cout << ch;
    tin.close();

    return 0;
}
```

3. (40 marks)

```
#include <fstream>
#include <iostream>
using namespace std;

int main()
{
    char ch;

    ofstream test1file("test1");
    test1file << "1 2 3 4 5 6 7 8 9 10\n";
    test1file << "11 12 13 14 15 16 17 18 19 20\n";
    test1file.seekp(17);
    test1file << "###";
    test1file.close();

    ifstream tin("test1");
    tin.seekg(15);
    cout << "The file's final content is:\n";
    while (tin.get(ch))
        cout << ch;
    tin.close();

    return 0;
}
```

4. (40 marks)

```
#include <fstream>
#include <iostream>
using namespace std;

int main()
{
    char ch;

    ofstream test1file("test1");
    test1file << "1 2 3 4 5 6 7 8 9 10\n";
    test1file << "11 12 13 14 15 16 17 18 19 20\n";
    test1file.seekp(17);
    test1file << "###";
    test1file.close();

    ifstream tin("test1");
    tin.seekg(20);
    cout << "The file's final content is:\n";
    while (tin.get(ch))
        cout << ch;
    tin.close();

    return 0;
}
```

5. (40 marks)

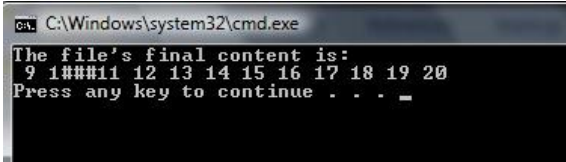
```
#include <fstream>
#include <iostream>
using namespace std;

int main()
{
    char ch;

    ofstream test1file("test1");
    test1file << "1 2 3 4 5 6 7 8 9 10\n";
    test1file << "11 12 13 14 15 16 17 18 19 20\n";
    test1file.seekp(19);
    test1file << "###";
    test1file.close();

    ifstream tin("test1");
    tin.seekg(15);
    cout << "The file's final content is:\n";
    while (tin.get(ch))
        cout << ch;
    tin.close();

    return 0;
}
```



6. (40 marks)

```
#include <fstream>
#include <iostream>
using namespace std;

int main()
{
    char ch;

    ofstream test1file("test1");
    test1file << "1 2 3 4 5 6 7 8 9 10\n";
    test1file << "11 12 13 14 15 16 17 18 19 20\n";
    test1file.seekp(22);
    test1file << "###";
    test1file.close();

    ifstream tin("test1");
    tin.seekg(15);
    cout << "The file's final content is:\n";
    while (tin.get(ch))
        cout << ch;
    tin.close();

    return 0;
}
```

