Assignment code optimization

CS347

Date: 13th April 2017

Total: 30 Points

Consider the following program

```
int fib (int base)
{
        int result, i, f0, f1;
        f0 = 0; f1 = 1; i = 2;
        if (base <= 1) {
        result = base;
}
else
{
        while (i <= base) {
        result = f0 + f1; f0 = f1; f1 = result; i = i + 1; }
}
return result;
}
```

1. Convert this program into suitable intermediate code.
2. Identify the basic block in the generated intermediate code and draw the CFG.
3. Compute optimized code applying all possible **local** and **global** optimizations techniques on the generated intermediate code.

Submission Steps:

- Open 172.16.1.3/~halder
- Click on “Submission System”
- Login: <your roll no.>
- Password: <blank>
- Once Login first time, you must change your password
- Create a directory with name “optimization” in your computer system
- Put your assignment files in the directory.
- ZIP the directory to create “optimization.zip”
- Upload the zip by clicking on Upload button.

Submission Deadline: - One lab session only