MIPS Assembly assignment #3

Fib and Fact

Resources:

- Digital Design and Computer Architecture by David Money Harris and Sarah L. Harris
- Internet

Software needed:

- MIPS simulator
- Screenshot tool
- Text editor

Using a MIPS simulator, write four programs:

1. ~~Iterative factorial~~
2. ~~Recursive factorial~~
3. ~~Iterative Fibonacci~~
4. ~~Recursive Fibonacci~~

- They all need
  - To print a title for the program (ex. ITTERATIVE FIBONACCI)
  - Input - a number, if negative or zero, quit
- Factorial
  - Output = Factorial of the input number
- Fibonacci
  - Output = The number in the Fibonacci sequence that corresponds to the input number
- Recursive
  - Make sure that stack manipulation is correct and caller/callee saves are correct

Make sure that there is good documentation and clear, understandable output.
Submit the program source code and a screenshot of the program running.
Create a single file that contains all of the above. That single file must be in one of the following formats because the instructor wants to be able to grade this using the D2L Assignment grader for iPad and it only works with the following image-capable (since you are embedding the screenshots) formats:

Text documents

- Microsoft Word (.doc, .docx)
- Portable Document Format (.pdf)
- Rich Text Format (.rtf, .rtfx)

Presentations

- Microsoft PowerPoint (.ppt, .pptx, .pps)