

# Question 1

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Steps:

1. Go to the gem5/src/cpu/simple/BaseSimpleCPU.py
2. Add the line

```
branchPred = Param.BranchPredictor(<branch_predictor>, "Branch Predictor")
```

Inside the class BaseSimpleCPU(BaseCPU):

<branch\_predictor> from LocalBP(), TournamentBP(), and BiModeBP() one at a time.

3. Now run the following command in the gem5 installation directory.

```
scons build/X86/gem5.opt -j5
```

4. Now run the hello program to generate the configs.ini in the md5out folder using the following command.

```
./build/X86/gem5.opt ./configs/example/se.py -c  
./tests/test-progs/hello/bin/x86/linux/hello --cpu-type=TimingSimpleCPU
```

Repeat this for each of the three branch predictors and keep the generated config.ini files for each execution.