

## Homework 1, Version 2

Due 30 January, 1985

First, create for yourself a data set to contain your executable programs (load modules). On the IBM systems you can do this with JCL similar to:

```
// job card
// EXEC PGM=IEFBR14
//NEWPDS DD DSN=UNC.CS.E530D.YOURNAME.PROGLIB,DISP=(NEW,CATLG),
//          UNIT=DISK,VOL=REF=UNCCC.ONLINE,SPACE=(TRK,(5,2,5))
```

Now write and save to your library, using the IBM PASCAL VS compiler a small program that reads in a sequence of integers, one per line, and prints out whether or not the integer is prime, that is, can be evenly divided (be sure to use `mod`) by any number other than itself or one. The JCL for this is tricky. All the strange commands are there to make sure your program will print debugging information if it crashes. I suggest you use the following:

```
// job card
/*JOBPARM FORMS=1121
// EXEC PSVCL,PARM.C='DEBUG,MAR(1,80)'
//C.SYSIN DD *
your pascal program
//L.SYSLIB DD
//          DD DISP=SHR,DSN=SYS2.PASCALVS.PASDEBUG.LOAD
//L.SYSLMOD DD DSN=UNC.CS.E530D.YOURNAME.PROGLIB(FACTOR),DISP=OLD
//L.SYSIN DD *
INCLUDE SYSLIB(AMPDEBUG)
```

Once you're done this, you should be able to execute your program. The JCL for that isn't so bad, considered you don't have any cataloged procedures to call, you just:

```
// job card
/*JOBPARM FORMS=1121
// EXEC PGM=FACTOR,PARM='/ERRFILE=OUTPUT'
//STEPLIB DD DSN=UNC.CS.E530D.YOURNAME.PROGLIB,DISP=OLD
//SYSIN DD DUMMY,DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//SYSPRINT DD SYSOUT=*,DCB=(RECFM=VBA,LRECL=133)
//OUTPUT DD SYSOUT=*,DCB=(RECFM=VBA,LRECL=133)
//INPUT DD *
your data goes here!
```

The program itself is trivial. It's the fighting with the system that will cause you problems. There are PASCAL/VS manuals in the Comp Center reading room. One only significant difference I recall between PASCAL/VS and Waterloo Pascal is that in PASCAL/VS you must execute a `"rewrite(output);"` and a `"reset(input);"` before you perform any I/O operations. The file `"UNC.CS.E530D.BROCK.SAMPLE"` contains the source, including JCL, for the program I gave out in class.

Remember to get whatever help you need from your fellow classmates. I understand there is some way to execute PASCAL/VS interactively from TSO. If you can do that, that's fine with me, as long as you tell me how it's done.

Just turn in a compile and one sample run of your program for grading.