

## **Work sheet 0.**

### **Practice problems for week 16-20 aug: FORTRAN OR C**

#### **More problems to be added on 19th Aug.**

Q0. Print your name on the screen. Print an integer, a floating point on your screen. Then figure out the random number generation command and plot a random number between 0 and 1 on your screen.

Q1a. Print 10 random numbers between 0 and 1 on your screen.

Q1b. Print the 10 random numbers in a file called test\_ran.dat in a column.

Q1c. Write the comment "Changing seed and generating 10 new random numbers" at the end of file.

Q1d. Change the seed, and print 10 new random numbers in the file test\_ran.dat.

(So I should be able to see 10 random nos of 1b. And then I should be able to see the comment of 1c, and then 10 new random numbers).

Q1e. in test\_ran.dat, write " NOW calculating average of 10 random numbers" and calculate the average:

Q1f. Calculate the average of 100, 10000, 1000000 random numbers and write it in test\_ran.dat. Please take care that the file is not overwritten; check the "append" option.

Q1g. Calculate the difference between 0.50d0 and the average values calculated in 1f; take the absolute value abs(-- ) and print. What do you see? Any comments or analysis ?