

Random Numbers

Exercises

Random Numbers

- What is a random number?
- Give some examples of when random numbers are useful to programmers

Software-derived Random Numbers

- Why is it not possible for software algorithms to produce true random numbers?
- What does "PRNG" mean?
- Describe briefly what a PRNG does

Hardware-derived Random Numbers

- What does "TRNG" mean?
- Give some examples of TRNG

rand()

- What does rand() do?
- What does RAND_MAX signify?
- What is the purpose of dividing by RAND_MAX?
- Convert the sample code from this slide into a working program
- (Remember to #include <stdlib>)
- Run the program again. What do you notice?

srand()

- Explain what srand() does
- Explain why srand() is useful
- Alter your program from the last exercise so it calls srand()
- (Remember to #include <ctime>)
- Run the program again. What do you notice?

Disadvantages of rand()

- Give some disadvantages of using rand()

Disadvantages of srand()

- Give some disadvantages of using srand()