Revision

- **Structures**
  - composite types
  - bundles of multiple values
- Arrays of structures can be created
- Values of structures can be dynamically created
- C style procedural programming:
  - structures, functions
  - values in structure are public
  - primitive values and structures as parameters (input and output)
- Object oriented programming
  - member functions
  - classes can hold values as private
  - don't have to pass these values as parameters
- **Switch statement**
  - multi-way branching as opposed to two way branching in if-else
- **Linking**
  - useful in dynamic data structures
  - example of linking structures for linked list
  - pointers used inside structure
  - a structure holds data values and also a pointer to the next structure
  - how to append at the end in a linked list
  - how to insert in the list from front
  - how to delete a node from a list
  - how to locate a node inside a linked list
Random numbers

#include <iostream>
#include <cstdlib>
#include <ctime>
using namespace std;

int main (int argc, char *argv[]) {
    srand (time(NULL)); // randomize seed
    cout << random()%100 << endl;
    // print a random number between 0 and 99
}
Monte Carlo Method

- statistical approach
- use of random no. generator
- we will use a uniform random no. sequence, and compute the value of Pi
  - Over to demo
  - why It works?
Review of Shell Commands

- .
- ..
- making directories
- present working directory
- changing present working directory
- searching through files
Review of Shell

- environment variables
- removing files
- copying files
- copying directories
- piping on command line
Projects

- Teams
- Statement submissions
- Evaluation Scheme
- Intention and Motivation
Reading C++ Online Pages

- how to go through manual pages
- how to search the information you want
- protocols
  - classes
    - member functions
  - c-style functions