Free C++ course outline

- Hello world
    - **helloWorld.cpp**
    Introduction on how to write a simple program that outputs the string "hello world" to the screen.
- Selecetion
    if and else
    - if and else and cin
        - **ifAndElseWCin.cpp**
        Shows how to use if and else clauses in cpp. The input by the user is obtained using the cin method.
    - if and else and strstream
        - **ifAndElseWStringStream.cpp**
        Shows how to use if and else clauses in cpp. The input by the user is obtained using the cin method. Stringstream is used to separate data and user input.

- Variable Types
    simple types
    - int
    - float
    - char
    compound types
    - arrays
    - vectors
    structs
    - simple structs
    - arrays of structs
    strings/charseq
- Operators
- Loops
    - for
    - while
    - do while
- Pointers
    - ptr to int with function
    - ptr to float with function
    - ptr to char with function, function to change lowCase to UpCase
    - ptr to struct with function
    - ptr to charArr that converts all chars from lowCase to UpCase
1. Simple objects
    Circle
    - circle.cpp
    Square
    - square.cpp
    Romb
    Triangle
    Cone
    Bike, instances of several types of bikes

- Classes constructors
- Classes Destructor
- /u*Classes simple inthertiance
- /u*Classes multiple inheritance
- Class friendship
- Classes polymorphism
- Simple overloading
- Possibly templates?
- File i/O
- Simple system programming in Linux?
- Threads?
- Using commandline argument argc. Argv for example to tell a cpp program how many units of memeory to allocate for a vector containning floats for examples.