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CS 241  
Control Structures

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# Midterm Exam Review

## CS 241: Midterm Exam Review

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# Overview

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- Midterm Exam Structure
- Midterm Exam Focus Topics
  - Computer Architecture
  - Computer Language
  - Pascal Data Types
  - Pascal Statements and Program Structure
  - Knowledge of Pascal Errors
  - Selection Statements

# Midterm Exam Structure

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- 4 primary sections worth 25 points/section
  - Section I: True or False questions
  - Section II: Short Answer questions
  - Section III: Code Fragment development
  - Section IV: Small Pascal program development

# Computer Architecture

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- Components of computer architecture
- Purpose for components
- Interconnection of components

# Computer Languages

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- Need to understand types of languages (e.g. Machine language, assembly language etc.)
- Consumer of those languages (i.e. compiler or assembler)
- Know specifics about the tools utilized for manipulating those language types:
  - Assembler
  - Compiler

# Pascal Data Types

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- Know each kind of data type (e.g. real, string, boolean)
- Know its purpose and what domain it represents
- Know how to correctly declare variables and/or define constants of the type
- Know how to correctly use with output and input statements

# Pascal Statements and Program Structure

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- Know the specific and correct syntax of Pascal statements (e.g. The assignment statement)
- Know the components of a program (i.e. The sections of a COMPLETE program)
- Know the permissible content and correct syntax for each major section
- Be able to name and label the key elements of a Pascal program

# Knowledge of Pascal Errors

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- Know types of errors
- Know when they are discovered
- Know the definition of specific types of errors E.g.  
What is a design error?

# Selection Statements

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- Know how to correctly specify an extended IF or nested IF
- Know how to correctly specify a CASE statement
- Know when it is better to use a CASE statement vs an IF statement
- Know how to specify compound boolean expressions
- Know the rules of CASE statement selectors

# Questions?

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