VISUAL BASIC .NET

Steak Jell

★ ★ ★ ★ ★ ★ ★ ★

VB .NET

* Object-oriented language

* Part of the Microsoft .NET family of languages

* Descended from older Visual Basic; parent of VBScript

* Garbage-collected

* Strongly tied to Windows Forms development

Q1

Data Types and Variables

* Java-like built-in data types:

  * Boolean, Byte, Char, Decimal, Double, Integer, Long, Object, Short, String

* Arrays

  * Typed; declared with an upper and optional lower bound

  * Historically could be non-zero-indexed; changed after VB6

Q2

Declarations

```
Dim myStr As String = "Hello, World!"


Dim myArr As Integer(3) = {2, 4, 6}
```

Strings

* Large standard string library

  * Substring, Trim, ToLower, ToUpper, Replace, Equals, Contains, Join, Compare, Copy

* Operator overloading: concatenate with + and &

OO Structures

✻ Classes work like usual (`Class` keyword)

✻ Two kinds of methods:

  ✻ `Functions` return values and are typed

  ✻ Subroutines (`Subs`) have no return or type

✻ Blocks declared using `Do` and `End` keywords

Potential gotchas

* Whitespace sensitive

* Comments with apostrophe

    * No multiline comments

* Function parameters specified by reference or by value

Threading

* Easy thread creation, instantiation

```
Dim t As Thread

t = New Thread(AddressOf Me.threadStartFn)

t.Start()
```

Updating GUI elements from non-main thread is tricky!

Windows Forms

* Very common for simple GUI building

* High-level built-in components

* Common OO interface

LIVE CODING