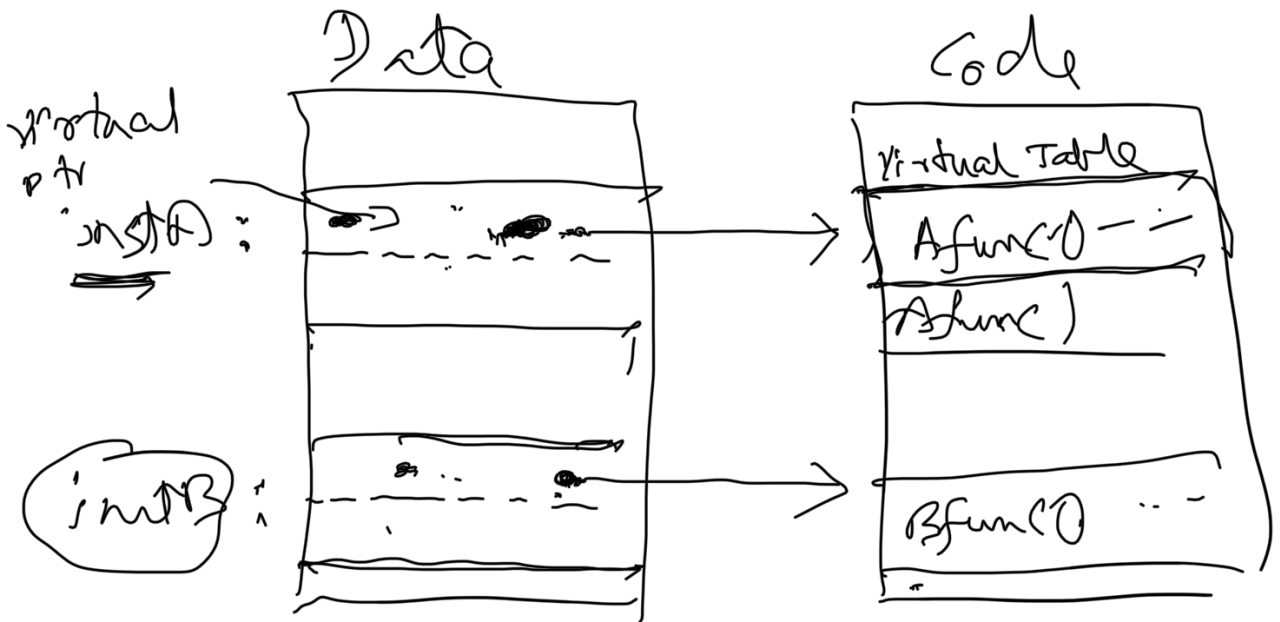


## **DAC 0521 MET-M Writeup Session - 14**

Polymorphism- It provides support for implementing reusable code that can operate upon multiple (poly) forms (morph) of data. It is available in two forms

1. Subtype Polymorphism- A new type which can be used as a substitute for an existing structured type provides its own implementations for the functions supported by the original structured type.
2. Parametric Polymorphism- A generic function or structured type is defined so that it can handle values of different data-types in an identical manner.

Virtual Dispatch - It is a mechanism for indirectly invoking a function supported by a structured type by discovering its implementation at runtime from the instance of that type. A structured type must enable virtual dispatch for its function so that its substitutable types can provide their own implementations for those functions.



`mov rdi, offset instA` | `mov rdi, offset instB`

`call Afunc()` # direct invocation

`mov rax, [rdi]`  
`call [rax]` # virtual dispatch