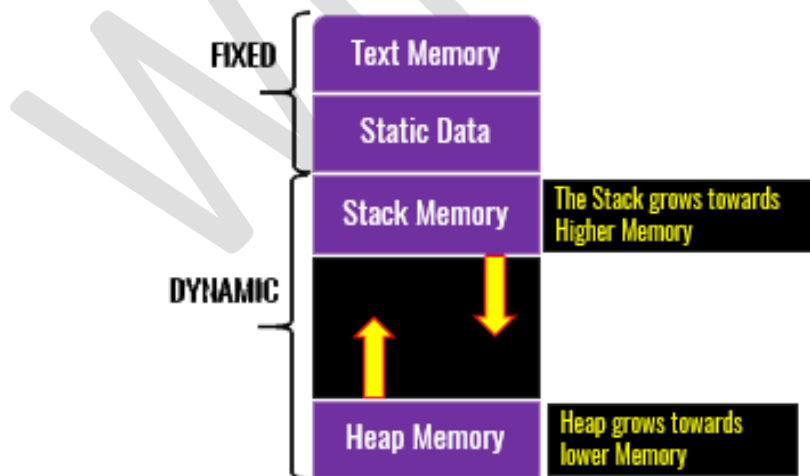


Compiler Design Runtime Environment

- Run-time Environment establishes relationships between names and **data objects**.
- The allocation and de-allocation of data objects are managed by the Run Time Environment
- Each execution of a procedure is referred to as an activation of the procedure.
- If the procedure is recursive, several of its activations may & alive at the same time. Each call of a procedure leads to an activation that may manipulate data objects allocated for its use.
- The representation of a data object at run time is determined by its type.
- Elementary data types, such as characters, integers, and reals can be represented by equivalent data objects in the target machine.
- However, aggregates, such as arrays, strings, and structures, are usually represented by collection of primitive objects.



s of primitive

Source Language Issues

- Procedure
- Activation Trees
- Control Stack
- The Scope of a Declaration
- Bindings of Names

Procedure

- A procedure definition is a declaration that associates an identifier with a statement. The identifier is the procedure name and the statement is the procedure body.
- A procedure returns value for the called function.
- A complete program will also be treated as a procedure.
- When a procedure name appears within an executable statement, we say that the procedure is called at that point.
- The basic idea is that a procedure call executes the procedure body.

For More Details Click Here:

<https://www.wikitechy.com/tutorials/compiler-design/compiler-design-runtime-environment>

