**Static and Dynamic Languages.**

**Static:** -

\* Perform type checking at compile time.

\* Errors will show in compile time.

\* Declare datatype before you use it.

\* More control.

Ex: int a = 10;

\* In above given example, the compiler checks the given variable data type in static language.

**Dynamic:** -

\* Perform type checking at runtime.

\* Error might not show till program runs.

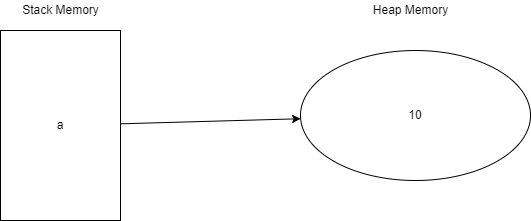
\* No need to declare datatype of variables.

\* Saves time in writing but might give error at runtime.

Ex: a = 10

\* In above given example, the dynamic language checks the datatype is runtime.

**Stack and Heap Memory: -**

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a = 10 Object

Reference Variable

**Garbage Collection:** - Object that do not have reference variable, the object will be removed by the memory by garbage collection.