RUNTIME ENVIRONMENT

- Runtime environment :

• storage allocation strategies =

1) Static :
   ① allocation is done at compile time.
   ② Bindings do not change at runtime.
   ③ one activation record per ~~produdure~~ procedure.

   Dis :
   ① Recursion is not supported.
   ② size of data objects must be known at compile time.
   ③ Data structure can't be created dinamicaly.

2) Stak : ① Whenever a new activation begins, activation records is pushed on to the stack and whenever activation ~~record ends~~ ends, activation record is popped of.

   ② local variable are bound on fresh storage.

   Dis :
   ① local variable cannot be ~~retai~~ retained once activation end.

3) Heaps : ① Allocation and delocation can be any order.

   Dis : ① Heap management is overhead.

- **Summary :**

activation can have -

① permanent lifetime in case of static allocation.

② Nested lifetime in case of ~~static~~ stack allocation.

③ Arbitrary life time in case of heap allocation.