

- A. Diagram the stack for eval, showing the values that it stores on the stack prior to calling process.**

See figure 1.

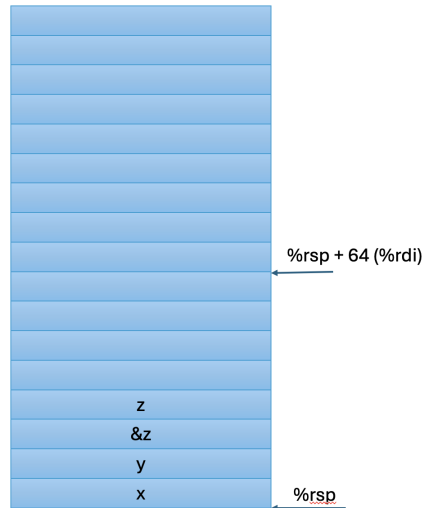


Figure 1: Stack frame for eval

- B. What value does eval pass in its call to process?**
`%rsp + 64`
- C. How does the code for process access the elements of structure argument s?**
 by use `%rsp` and offset.
- D. How does the code for process set the fields of result structure r?**
 By use parameter passed from eval.
- E. Complete your diagram of the stack frame for eval, showing how eval access the elements of structure r following the return from process.**
 See figure 2. The function eval access the elements of structure r by `%rsp` and offset.
- F. What general principles can you discern about how structure values are passed as function arguments and how they are returned as function results?**
 The space for the structure is allocated by the caller, and the address is passed as parameter. The result is accessed by caller using `%rsp` and offset.

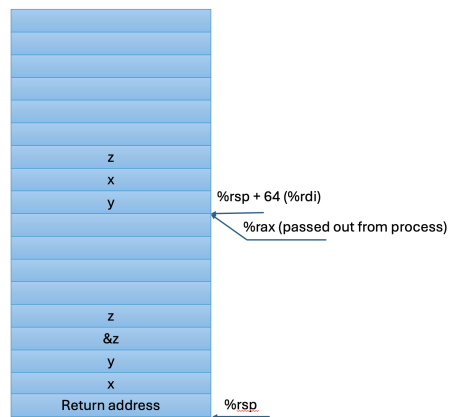


Figure 2: Stack after call process