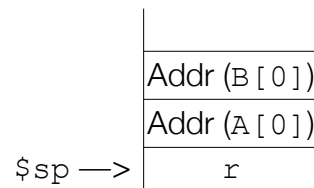


Question 1: (15 points)

For this question, assume that:

- p, q, i, j are 32-bit integers whose values are stored in $\$s0, \$s1, \$s2$, and $\$s3$, respectively.
- A and B are arrays of integers.
- r is a pointer declared as `int *r`.
- r , the base address of array A , and the base address of array B are all in the stack frame of the current function, as shown below



For each of the C statements below, give the translation into MIPS. Do not use pseudo-instructions in your code. Clearly label which MIPS instructions are for which statement.

- a. (5 points) $q = *r$
- b. (5 points) $B[i] = A[j]$
- c. (5 points) $p = q + A[B[j]]$