

(Assuming the question meant $p = r$ and not $p \neq r$)

If MERGE-SORT is called with $p \leq r$, then the subsequent calls to MERGE-SORT(p, q) and MERGE-SORT($q + 1, r$) will both have $p \leq q$ and $q + 1 \leq r$. This is because for $p < r$, $p \leq \lfloor \frac{p+r}{2} \rfloor \leq r - 1$. Thus we only have to check for $p = q$.