**START FUNCTION**

**PASS IN BY REFERENCE: BOARD, x-co-ordinate, y-co-ordinate**

**IF BOARD FULL return**

**PRODUCE PRIORITY\_QUEUE,**

**START LOOP 1(FIND MOVES)**

**START LOOP 2**

**CREATE TEMP BOARD**

**IF VALID MOVE – ADD MOVE**

**GENERATE HEURISTIC VALUE**

**ADD TO PRIORITY\_QUEUE**

**END LOOP 2**

**END LOOP 1**

**IF PRIORITY\_QUEUE > 0**

**X = PRIORITY\_QUEUE TOP**

**Y = PRIORITY\_QUEUE TOP**

**ELSE PROMPT “CANNOT FIND REPLACEMENT”**

**PROMPT “HEURISTIC = PRIORITY\_QUEUE TOP HEURISTIC VALUE AT (X,Y)”**