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MAX_CHARS = 256

def max(a, b):
    return a if a>b else b

def badCharHeuristic(pat, size, badchar):
    for i in range(MAX_CHARS):
        badchar[i] = -1

    for i in range(size):
        badchar[ord(pat[i])] = i

def patternsearch(text, pat):
    m = len(pat)
    n = len(text)
    badchar = [-1] * MAX_CHARS

    badCharHeuristic(pat, m, badchar)

    s = 0
    while s <= (n - m):
        j = m - 1

        while j >= 0 and pat[j] == text[s+j]:
            j -= 1

        if j < 0:
            print("\n Pattern occurs at position=", s)
            s += m - badchar[ord(text[s + m])] if (s + m) < n else 1
        else:
            s += max(1, j - badchar[ord(text[s + j])])

#main code
text = input("enter the text: ").rstrip('\n')
pat = input("enter the pattern: ").rstrip('\n')

patternsearch(text, pat)

```

output:

run1:

enter the text: SKYWARDPUBLISHERS

enter the pattern: PUB

Pattern occurs at position= 7

run2:

enter the text: MALAYALAM

enter the pattern: LA

Pattern occurs at position= 2

Pattern occurs at position= 6