RABIN KARP:

```cpp
#include <bits/stdc++.h>
using namespace std;
#define d 256
void search(char pat[], char txt[], int q)
{
        int M = strlen(pat);
        int N = strlen(txt);
        int i, j;
        int p = 0;
        int t = 0;
        int h = 1;
        for (i = 0; i < M - 1; i++)
                h = (h * d) % q;
        for (i = 0; i < M; i++) {
                p = (d * p + pat[i]) % q;
                t = (d * t + txt[i]) % q;
        }
        for (i = 0; i <= N - M; i++) {
                if (p == t) {
                        for (j = 0; j < M; j++) {
                                if (txt[i + j] != pat[j]) {
                                        break;
                                }
                        }
                        if (j == M)
                                cout << "Pattern found at index " << i
                                        << endl;
                }
                if (i < N - M) {
                        t = (d * (t - txt[i] * h) + txt[i + M]) % q;
                        if (t < 0)
                                t = (t + q);
                }
        }
}
int main()
{
        char txt[] = "vighnesh is here";
        char pat[] = "here";
        int q = INT_MAX;
        search(pat, txt, q);
        return 0;
}
```

OUTPUT:

Pattern found at index 12