EXPERIMENT NO.12

Naive String-Matching Algorithm

Program:-

```
#include <stdio.h>
#include <string.h>

void naiveStringMatch(char text[], char pattern[]) {
    int m = strlen(pattern);
    int n = strlen(text);

    for (int i = 0; i <= n - m; i++) {
        int j;
        for (j = 0; j < m; j++) {
            if (text[i + j] != pattern[j])
                break;
        }

        if (j == m) {
            printf("Pattern found at index %d\n", i);
        }
    }
}

int main() {
    char text[] = "ABABDABACDABABCABAB";
    char pattern[] = "ABABCABAB";

    printf("Text: %s\n", text);
    printf("Pattern: %s\n", pattern);

    printf("Occurrences:\n");
    naiveStringMatch(text, pattern);

    return 0;
}
```

Output:-

```
/tmp/kSGs64t7x6.o
Text: ABABDABACDABABCABAB
Pattern: ABABCABAB
Occurrences:
Pattern found at index 10


=== Code Execution Successful ===
```