

EXPERIMENT NO.6

1)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:-

```
PS C:\TurboC++\Disk\TurboC3\BIN> gcc Naive.c -o Naive  
PS C:\TurboC++\Disk\TurboC3\BIN> ./Naive  
Text: ABABDABACDABABCABAB  
Pattern: A  
Occurrences:  
Pattern found at index 0  
Pattern found at index 2  
Pattern found at index 5  
Pattern found at index 7  
Pattern found at index 10  
Pattern found at index 12  
Pattern found at index 15  
Pattern found at index 17
```