

2...// Function to read a string manually (without using built-ins)

```
void readString(char str[])
{
    int i = 0;
    char ch;
    while ((ch = getchar()) != '\n' && ch != EOF)
    {
        str[i++] = ch;
    }
    str[i] = '\0'; // terminate string
}
```

// Function to find and replace pattern in main string

```
void findAndReplace(char STR[], char PAT[], char REP[])
```

```
{
    char ans[200];    // resultant string
    int i, j, k, c, m; // counters
    int flag = 0;     // to check if pattern exists

    i = j = c = 0;

    while (STR[c] != '\0') // loop until end of main string
    {
        m = c;           // start matching from position c
        i = 0;

        // Check if pattern matches
        while (STR[m] == PAT[i] && PAT[i] != '\0')
        {
            m++;
            i++;
        }

        // If full pattern matched
        if (PAT[i] == '\0')
        {
            flag = 1;
            // Copy replace string into answer
            for (k = 0; REP[k] != '\0'; k++, j++)
                ans[j] = REP[k];
            c = m; // move c to position after matched pattern
        }
        else
        {

```

```

        // Copy one character from STR to ans
        ans[j++] = STR[c++];
    }
}

ans[j] = '\0'; // terminate the resultant string

// Display result
if (flag == 0)
    printf("\nPattern not found!!!\n");
else
    printf("\nThe RESULTANT string is: %s\n", ans);
}

// Main function
void main()
{
    char STR[100], PAT[50], REP[50];

    printf("Enter the MAIN string:\n");
    readString(STR);

    printf("Enter the PATTERN string:\n");
    readString(PAT);

    printf("Enter the REPLACE string:\n");
    readString(REP);

    findAndReplace(STR, PAT, REP);
}

```