Program 6

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


int table[1000];
void ShiftTableComputation(char p[])
{
int m,i,j;


    m=strlen(p);
       for (i=0;i<1000;i++)
          table[i]=m;
       for (j=0;j<=m-2;j++)
          table[p[j]]=m-1-j;
}


int HPoolStringMatching(char p[],char t[])
{

int m,n,i,j,k;
        //Shift Table Computation
      ShiftTableComputation(p);

      m=strlen(p);
      n=strlen(t);

      i=m-1;
      while (i<=n-1)
      {
            k=0;
            while ((k<=m-1) && t[i-k]==p[m-1-k])
                  k++;
            if (k==m)
                  return i-m+1;
            else
                  i=i+table[t[i]];
```

```c
        }
        return -1;
}

int main()
{
        char str[100],ptr[100];
        int res;
    printf("Enter the text:");
    scanf("%s",str);
    printf("Enter pattern:");
    scanf("%s",ptr);
    res=HPoolStringMatching(ptr,str);
    if (res==-1)
            printf("Not found");
    else
            printf("Pattern found at position %d",res+1);
}
```