EXPERIMENT:-4E

PROGRAM:

```c
#include<stdio.h
>
#include<string.
h> int main()
{
        char s[100];
        int
i,flag,flag1;     int l;
        printf("enter a string to check:");
        scanf("%s",s);
        l=strlen(s);
flag=1;
        for(i=0;i<l;i++)
        {
                if(s[i]!='0' && s[i]!='1')
                {
                   flag=0;
                }
        }
        if(flag==1)
                printf("string is Valid\n");
        else
                printf("string is Not Valid\n");
        if(flag==1)
        {
                flag1=0;
                for(i=0;i<l-2;i++)
                {
                        if(s[i]=='1')
                        {
                                if(s[i+1]=='0' && s[i+2]=='1')
                                {
                                        flag1=1;
                                        printf("Substring 101 exists.  String accepted\n");
                                        break;
                                }
                        }
                }
                if(flag1==0)
```

```
                    printf("Substring 101 does not exist.  String not accepted\n");
        }
}
```

OUTPUT:-

```
enter a string to check:000111010100
Substring 101 exists.
String accepted

Process returned 0 (0x0)    execution time : 5.531 s
Press any key to continue.
```

```
enter a string to check:0000111100001111
Substring 101 does not exist.
String not accepted

Process returned 0 (0x0)    execution time : 6.312 s
Press any key to continue.
```

```
enter a string to check:abbabba
string is Not Valid

Process returned 0 (0x0)    execution time : 5.828 s
Press any key to continue.
```