

strNRChr

Write a C function `strNRChr()` that locates the last n^{th} occurrence of `ch` in the string pointed to by `str`. The function returns a pointer to the character, or a NULL pointer if `ch` does not occur in the string. For example, if `str` = "abacadae", `ch` = 'a' and `n` = 2, then the function returns the address of the substring "adae" within "abacadae". In this function, there is no need to check input error.

A sample program template for testing the function is given below:

```
#include <stdio.h>
#include <string.h>
char *strNRChr(char *str, int n, char ch);
int main()
{
    char str[80], ch, dummy;
    char *temp=NULL;
    int n;

    printf("Enter a string: \n");
    scanf("%s",str);
    scanf("%c",&dummy);
    printf("Enter a char: \n");
    scanf("%c",&ch);
    printf("Enter the occurrence: \n");
    scanf("%d", &n);
    temp = strNRChr(str, n, ch);
    if (temp!=NULL)
        printf("strNRChr(): %s\n", temp);
    else
        printf("strNRChr(): null string\n");
    return 0;
}
char *strNRChr(char *str, int n, char ch)
{
    /* Write your code here */
}
```

Some test input and output sessions are given below:

(1) Test Case 1

```
Enter a string:
abacadae
Enter a char:
z
Enter the occurrence:
1
strNRChr(): null string
```

(2) Test Case 2

```
Enter a string:
abacadae
Enter a char:
```

```

a
Enter the occurrence:
1
strNRChr(): ae

```

(3) Test Case 3

```

Enter a string:
abacadae
Enter a char:
a
Enter the occurrence:
2
strNRChr(): adae

```

(4) Test Case 4

```

Enter a string:
abacadae
Enter a char:
a
Enter the occurrence:
3
strNRChr(): acadae

```

```

#include <stdio.h>
#include <string.h>
char *strNRChr(char *str, int n, char ch);
int main()
{
    char str[80], ch, dummy;
    char *temp=NULL;
    int n;

    printf("Enter a string: \n");
    scanf("%s",str);
    scanf("%c",&dummy);
    printf("Enter a char: \n");
    scanf("%c",&ch);
    printf("Enter the occurrence: \n");
    scanf("%d", &n);
    temp = strNRChr(str, n, ch);
    if (temp!=NULL)
        printf("strNRChr(): %s\n", temp);
    else
        printf("strNRChr(): null string\n");
    return 0;
}

char *strNRChr(char *str, int n, char ch)
{
    int len;
    int i;
    char *name;
    int k=0;
    int j;
    int count = 0;
    int a;

    len = strlen(str);

    for(i=0;i<len;i++)
    {
        if(ch == str[len-1-i])
        {
            count+=1;
            if(count == n)
            {
                a=len-1-i;
                for(j=a;j<len;j++)
                {
                    name[k] = str[j];
                    k++;
                }
                return name;
            }
        }
    }
    return NULL;
}

```

return (str+i)

