stringncpy

Write a C function **stringncpy()** that copies not more than *n* characters (characters that follow a null character are not copied) from the array pointed to by *s2* to the array pointed to by *s1*. If the array pointed to by *s2* is a string shorter than *n* characters, null characters are appended to the copy in the array pointed to by *s1*, until *n* characters in all have been written. The stringncpy() returns the value of *s1*. The function prototype is given below:

```
char *stringncpy(char *s1, char *s2, int n);
```

A sample program template is given below to test the function:

```
#include <stdio.h>
#include <string.h>
char *stringncpy(char *s1, char *s2, int n);
int main()
{
  char targetStr[40], sourceStr[40], *target, *p;
  int length;

  printf("Enter the string: \n");
  fgets(sourceStr, 40, stdin);
  if (p=strchr(sourceStr,'\n')) *p = '\0';
  printf("Enter the number of characters: \n");
  scanf("%d", &length);
  target = stringncpy(targetStr, sourceStr, length);
  printf("stringncpy(): %s\n", target);
  return 0;
}
char *stringncpy(char *s1, char *s2, int n)
{
  /* Write your code here */
}
```

Some sample input and output sessions are given below:

(1) Test Case 1:

```
Enter the string:
I am a boy.
Enter the number of characters:
7
stringncpy(): I am a
```

(2) Test Case 2:

```
Enter the string:
I am a boy.
Enter the number of characters:
21
stringncpy(): I am a boy.
```

(3) Test Case 3:

Enter the string:
somebody
Enter the number of characters:
7
stringncpy(): somebod

(4) Test Case 4:
Enter the string:
somebody
Enter the number of characters:
21
stringncpy(): somebody