Assignment No.10

Q.1 Write a user define functions

-:Code:-

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#include<stdio.h>
#include<string.h>
void mystrcpy(char*,char*);
int mystrlen(char*);
int mystrcmp(char*,char*);
void mystrcat(char*,char*);
void mystrncpy(char*,char*,int);
char* mystrupr(char*);
char* mystrlwr(char*);
char* mystrrev(char*);
char* mystrstr(char*,char*);
int mystrcasecmp(char*,char*);
char* mystrrchr(char*,char);
int mystrncmp(char*,char*,int);
char* mystrncat(char*,char*,int);
char* mystrpbrk(char*,char*);
char* mystrset(char*,char);
char* mystrnset(char*,char,int);
char* mymemset(char*,char,int);

void main(){
        char str1[]="Firstbit";
        char str2[]=" Solution";
        char str3[20];
        char str4[20];

        printf("strlen(str1) : %d \n",strlen(str1));
        printf("mystrlen(str1) : %d \n",mystrlen(str1));

        strcpy(str3,str1);
        printf("strcpy(str3,str1) : %s \n",str3);
        mystrcpy(str4,str1);
        printf("mystrcpy(str4,str1) : %s \n",str4);
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strcat(str3,str2);
printf("strcat(str3,str2) : %s \n",str3);
mystrcat(str4,str2);
printf("strcat(str4,str2) : %s \n",str4);

printf("strncat(str1,str2,9) : %s \n",strncat(str1,str2,9));
printf("mystrncat(str1,str2,9) : %s\n",mystrncat(str1,str2,9));

if(strcmp(str3,str4)==0){
	printf("strcmp(str3,str4) : both string are equal \n");
}else{
	printf("strcmp(str3,str4) : both string are not equal \n");
}
if(mystrcmp(str3,str4)==0){
	printf("strcmp(str3,str4) : both string are equal \n");
}else{
	printf("strcmp(str3,str4) : both string are not equal \n");
}

if(strncmp(str1,str3,11)==0){
	printf("strncmp(str1,str3,11) : both string are equal \n");
}else{
	printf("strncmp(str1,str3,11) : both string are not equal \n");
}
if(mystrncmp(str1,str3,11)==0){
	printf("strncmp(str1,str3,11) : both string are equal \n");
}else{
	printf("strncmp(str1,str3,11) : both string are not equal \n");
}

printf("strchr(str1,'b') : %s \n",strchr(str1,'b'));
//printf("mystrchr(str1,'b') : %s \n",mystrchr(str1,'b'));

printf("strstr(str3,'bit') : %s \n",strstr(str3,"bit"));
printf("mystrstr(str3,'bit') : %s \n",mystrstr(str3,"bit"));

char str5[]="Firstbit,Solution,Java Batch";
printf("strtok(str4,',') : %s \n",strtok(str4,","));

char str6[]="Firstbit";
char str7[]="lastbit";
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strncpy(str6,str7,3);
printf("strncpy(str6,str7,3) : %s \n",str6);

char str8[]="Firstbit";
char str9[]="lastbit";
mystrncpy(str8,str9,3);
printf("mystrncpy(str8,str9,3) : %s \n",str8);

printf("strpbrk(str1,'rt') : %s \n",strpbrk(str1,"rt"));
printf("mystrpbrk(str1,'rt') : %s \n",mystrpbrk(str1,"rt"));

printf("%s \n",str1);
printf("strrchr(str1,'i') : %s \n",strrchr(str1,'u'));
printf("mystrrchr(str1,'i') : %s \n",mystrrchr(str1,'u'));

printf("%s \n",str1);
printf("strrev(str1,'i') : %s \n",strrev(str1));
printf("mystrrev(str1,'i') : %s \n",mystrrev(str1));

printf("strset(str3,  'x') : %s \n",strset(str3,'x'));
printf("mystrset(str4,'x') : %s \n",mystrset(str4,'x'));

printf("strset(str1,'x') :   %s \n",strnset(str1,'x',3));
printf("mystrset(str2,'x') : %s \n",mystrnset(str2,'x',3));

char str10[20];
char str11[20];
printf("memset(str10,'x',6) :   %s \n",memset(str10,'x',6));
printf("mymemset(str10,'x',6) : %s \n",mymemset(str10,'x',6));

//str7[]="Firstbit";
printf("strupr(str7) :   %s \n",strupr(str7));

printf("strlwr(str6) :   %s \n",strlwr(str6));

printf("strupr(str6) :   %s \n",mystrupr(str6));

printf("strlwr(str7) :   %s \n",mystrlwr(str7));

if(strcasecmp(str6,str7)==0){
        printf("strcasecmp(str6,str7) : both string are equal \n");
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	}else{
		printf("strcasecmp(str6,str7) : both string are not equal \n");
	}
	if(mystrcasecmp(str6,str7)==0){
		printf("mystrcasecmp(str6,str7) : both string are equal \n");
	}else{
		printf("mystrcasecmp(str6,str7) : both string are not equal \n");
	}

	if(strncasecmp(str6,str7,3)==0){
		printf("strncasecmp(str1,str3,11) : both string are equal \n");
	}else{
		printf("strncasecmp(str1,str3,11) : both string are not equal \n");
	}
	if(mystrncasecmp(str6,str7,3)==0){
		printf("strncasecmp(str6,str7,3) : both string are equal \n");
	}else{
		printf("strncasecmp(str6,str7,3) : both string are not equal \n");
	}
}
int mystrlen(char* str1){
	int i=0,count=0;
	while(str1[i]!='\0'){
		count++;
		i++;
	}
	return count;
}
void mystrcpy(char* str4,char* str1){
	int i=0;
	while(str1[i]!='\0'){
		str4[i]=str1[i];
		i++;
	}
	str4[i]=str1[i];
}
void mystrcat(char* str4,char* str2){
	int i=0,j=0;
	while(str4[i]!='\0'){

		i++;
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	}
	while(str4[j]!='\0'){
		str4[i]=str2[j];
		i++;
		j++;
	}
}

char* mystrncat(char* str1,char* str2,int a){
	int i=0,j=0;
	while(str1[i]!='\0'){

		i++;
	}
	while(a>0&&str2[j]!='\0'){

		str1[i]=str2[j];
		i++;
		j++;
		a--;
	}
	str1[i]=str2[j];
	return str1;
}

int mystrcmp(char* str3,char* str4){
	int i=0;
	while(str3[i]==str4[i]){
		if(str3[i]=='\0'&&str4[i]=='\0'){
			return 0;
		}
		i++;
	}
	return 1;
}
int mystrncmp(char* str3,char* str4,int a){
	int i=0;
	while(a>0&&str3[i]==str4[i]){
		if(str3[i]=='\0'&&str4[i]=='\0'){
			return 0;
		}
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		i++;
	}
	return 1;
}
void mystrncpy(char* str8,char* str9,int a){
	int i=0;
	while(i<=a){
		str8[i]=str9[i];
		i++;
	}
}
char* mystrpbrk(char* str,char* a){
	int i=0;
	while(str[i]!='\0'){
		if(str[i]==a[0]){
			return &str[i];
			}
			i++;
	}
}
char* mystrrchr(char* str,char a){
	int i=0;
	while(str[i]!='\0'){
		i++;
		}
	do{
		if(str[i]==a){
			return &str[i];
		}
		i--;
	}while(i>0);
}
char* mystrrev(char* str1){
	int i=0,j=0;
	while(str1[i]!='\0'){
		//printf("--> %c \n",str1[i]);
		i++;
	}
	char str[i];
	for(i=0;str1[i]!='\0';i++){
		str[i]=str1[i];
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	}
	//str[i]=str1[i];
	i--;
	do{
		//printf(" %c = %c  <--\n",str1[j],str[i]);
		str1[j]=str[i];
		j++;
		i--;
	}while(i>=0);
	return str1;
}
char* mystrset(char* str,char a){
	int i=0;
	while(str[i]!='\0'){
		str[i]=a;
		i++;
	}
	return str;
}
char* mystrnset(char* str,char a,int x){
	int i=0;
	while(x>0&&str[i]!='\0'){
		str[i]=a;
		i++;
		x--;
	}
	return str;
}
char* mymemset(char* str,char a,int x){
	int i=0;
	while(x>0){
		str[i]=a;
		i++;
		x--;
	}
	return str;
}
int mystrcasecmp(char* str6,char* str7){
	int i=0;
	while(str6[i]==str7[i]){
		if(str6[i]=='\0'&&str7[i]=='\0'){
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```
                return 0;
            }
            i++;
        }
        return 1;
}
int mystrncasecmp(char* str6,char* str7,int a){
        int i=0;
        while(a>0&&str6[i]==str7[i]){
            if(str6[i]=='\0'&&str7[i]=='\0'){
                return 0;
            }
            i++;
        }
        return 1;
}
char* mystrstr(char* str3,char* str){
            int i=0,j=0,check;
            for(i=0;str3[i]!='\0';i++){
                if(str[0]==str3[i]){
                    check=0;
                    for(j=1;str[j]==str3[i+j];j++){
                        }
                    if(str[j]=='\0'){
                                check=1;
                        }
                    if(check==1){

                            return &str3[i];
                        }
                }
        }
        return NULL;
}
char* mystrupr(char* str6){
        int i;
        for(i=0;str6[i]!='\0';i++){
            str6[i]=str6[i]-32;
        }
        return str6;
}
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char* mystrlwr(char* str7){
	{
	int i;
	for(i=0;str7[i]!='\0';i++){
		str7[i]=str7[i]+32;
	}
	return str7;
}
}
```