

1)swap all the even and odd characters in String(i/p:abcd o/p:badc i/p:abc o/p:bac)

```
#include<stdio.h>
#include<string.h>
void swap(char *a,char *b);
int main()
{
    char str[50];
    printf("Enter the string :");
    scanf("%s",str);
    int len = strlen(str);
    for(int i=1;i<len;i=i+2){
        swap(str+i,str+i-1);
    }
    printf("%s",str);
}
void swap(char* a,char* b)
{
    char temp;
    temp=*a;
    *a=*b;
    *b=temp;
}
```

2)convert roman letters to integers(i/p:IV o/p:4)

```
#include<stdio.h>

#include<string.h>

int main()
{
    char rom[50];

    printf("Enter the roman number :");

    scanf("%s",rom);

    printf("%s",rom);

    if(rom == "X")

        printf("\n10");

    else if(rom[2] == 'I' && rom[1] == 'I' && rom[0] == 'I')

        printf("\n3");

    else if(rom[1] == 'I' && rom[0] == 'I')

        printf("\n2");

    else if(rom[0] == 'I' && rom[1] == 'V')

        printf("\n4");

    else if(rom[3] == 'I' && rom[2] == 'I' && rom[1] == 'I' && rom[0] == 'V')

        printf("\n8");

    else if(rom[2] == 'I' && rom[1] == 'I' && rom[0] == 'V')

        printf("\n7");

    else if(rom[1] == 'I' && rom[0] == 'V')

        printf("\n6");

    else if(rom[0] == 'V')

        printf("\n5");

    else if(rom[0] == 'I' && rom[1] == 'X')

        printf("\n9");

    else if(rom[0] == 'I')

        printf("\n1");

    else{

        printf("\nEnter a number between 0 and 10");
```

3)find the difference between 2 timings

(1:10 and 2:30) o/p:80 minutes(1:20)

```
#include<stdio.h>
#include<string.h>
int min(char x[]);
int main()
{
    int stt=0,ent=0;
    char s[10],e[10];
    printf("Enter start time like this 12:00 =");
    scanf("%s",s);
    printf("%s",s);
    printf("\nEnter end time like this 12:00 =");
    scanf("%s",e);
    stt = min(s);
    ent = min(e);
    int time=ent-stt;
    printf("\n%d",time);
    int hr;
    hr=0;
    while(time >= 60){
        time=time-60;
        hr++;
    }
    printf("(%d:%d)",hr,time);
}
int min(char* x)
{
    int hr1=(int)x[0]-48;
    int hr2=(int)x[1]-48;
    int mi1=(int)x[3]-48;
```

```
int mi2=(int)x[4]-48;
int hr=0,mi=0;
hr = (hr1*10)+hr2;
mi = (mi1*10)+mi2;
int t=(hr*60)+mi;
return t;
}
```

4)Find the factorial of no using recursion

```
#include<stdio.h>

#include<string.h>

int fac(int a);

int main()
{
    int inp=0;
    printf("Enter the number :");
    scanf("%d",&inp);
    int ans=fac(inp);
    printf("%d",ans);
    return 0;

}

int fac(int a)
{
    if(a == 1){
        return 1;
    }
    else{
        return a*fac(a-1);}
}
```

5)print the no of appearance of the character in string

o/p:w-1 i-1 n-2 e-1 r-1

```
#include <stdio.h>
```

```
#include<string.h>
```

```
int main() {
```

```
    char a[100],b[50];
```

```
    int c[50];
```

```
    int n=0;
```

```
    printf("Enter the string : ");
```

```
    scanf("%s",a);
```

```
    for(int i=0;i<strlen(a);i++){
```

```
        int x=0;
```

```
        for(int j=0;j<strlen(b);j++){
```

```
            if(b[j] == a[i]){
```

```
                x++;
```

```
            }
```

```
        }
```

```
        if(x==0)
```

```
        {
```

```
            b[n]=a[i];
```

```
            n++;
```

```
        }
```

```
    }
```

```
    for(int i=0;i<strlen(b);i++){
```

```
        int count=0;
```

```
        for(int j=0;j<strlen(a);j++){
```

```
            if(b[i]==a[j]){
```

```
                count++;
```

```
            }
```

```
        }
```

```
    printf("\n%c occurs %d time",b[i],count);  
}  
return 0;  
}
```