

Q2

Ans

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

int main()
{
    int i, j, len, numster[100], numkey[100],
    numcipher[100];
    char ster[100], key[100], cipher[100];
    printf ("Enter a string text to encrypt");
    gets(ster);
    for(i=0; j=0; i < strlen(ster); i++)
    {
        if (ster[i] != '\0')
        {
            ster[j] = toupper(ster[i]);
            j++;
        }
    }
    ster[j] = '\0';
    for (i = 0; i < strlen(ster); i++)
    {
        numster[i] = ster[i] - 'A';
    }
}
```

```
printf("Enter key string of random text");  
gets(key);
```

```
for (i = 0, j = 0; i < strlen(key); i++)
```

```
{
```

```
    if (key[i] != ' ')
```

```
    {
```

```
        key[j] = toupper(key[i]);
```

```
        j++;
```

```
    }
```

```
}
```

```
key[j] = '\0';
```

```
for (i = 0; i < strlen(key); i++)
```

```
{
```

```
    numkey[i] = key[i] - 'A';
```

```
}
```

```
for (i = 0; i < strlen(str); i++)
```

```
{
```

```
    numcipher[i] = numstr[i] + numkey[i];
```

```
}
```

```
for (i = 0; i < strlen(str); i++)
```

```
{
```

```
    if (numcipher[i] > 25)
```

```
    {
```

```
numcipher[i] = numcipher[i] - 26;
```

```
}
```

```
}
```

```
printf("One time Pad cipher text is\n");
```

```
for(i = 0; i < strlen(str); i++)
```

```
{
```

```
    printf("%c", (numcipher[i] + 'A'));
```

```
}
```

```
printf("\n");
```

```
}
```