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Roll-No-   1024722(12)

Course-   BSC IT (6th)

Q.2-Sol)

```c
#include <stdio.h>
#include <string.h>
#include <ctype.h>
main ()
{
    int i, j, lent, lend, numstr[100], numkey[100], numcipher[100];

    char str[100], key[100], cipher[100];
    printf(" Enter a string text to encrypt \n");
    gets(str);
    for (i=0; j=0; i<strlen(str); i++)

    {
        if(str[i] != ' ')

        {
            str[j] = toupper(str[i]);
            j++;

        }
    }
    str[j] = '\0';
    for (i=0; i<strlen(str); i++)

    {
        num[i] = str[i] - 'A';

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

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```c
for (i=0, y=0; i<strlen(key); i++)
{
    if(key[i] != ' ')
    {
        key[y] = toupper(key[i]);
        y++;
    }
}
key[y] = '\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;
    }
}
```

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```
printf(" One Time Pad is \n");
for (i =0; i< strlen(str); i++)
{
    printf("%c ", (numcipher [i] + 'A'));
}
printf("\n");
}
}
```

Amit

```
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ter key string of random text
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 e Time Pad  is
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ocess exited after 7.241 seconds with return value 0
 ess any key to continue . . .
```

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