

Q1

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

```
#include <stdlib.h>
```

```
#include <time.h>
```

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

```
typedef struct {
```

```
    char userid[20];
```

```
    char password[20];
```

```
} User;
```

```
int main() {
```

```
    User user = {"admin", "1234"};
```

```
    char inputUser[20], inputPass[20];
```

```
    int otp, enteredOtp;
```

```
    srand(time(0));
```

```
    printf("Enter User ID: ");
```

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

```
    printf("Enter Password: ");
```

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

```
    if (strcmp(user.userid, inputUser) == 0 && strcmp(user.password, inputPass) == 0) {
```

```
        otp = (rand() % 9000) + 1000;
```

```
        printf("\nYour OTP is: %d\n", otp);
```

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

```
        scanf("%d", &enteredOtp);
```

```

    if (enteredOtp == otp) {
        printf("\nLogin Successful!\n");
    } else {
        printf("\nIncorrect OTP. Login Failed.\n");
    }
} else {
    printf("\nInvalid credentials. Login Failed.\n");
}

return 0;
}

```

```

● PS C:\Users\AJIT\Desktop\C\Tests\Test8> cd "c:\Users\AJIT\Desktop\C\Tests\Te
st8\" ; if ($?) { gcc Q1.c -o Q1 } ; if ($?) { .\Q1 }
Enter User ID: admin
Enter Password: 1234

Your OTP is: 2898
Enter Password: 1234

Your OTP is: 2898
○
Your OTP is: 2898
Your OTP is: 2898
Enter the OTP: 2898

Login Successful!

```

Q2

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

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

```
int main(){
    char str[10];
    printf("Enter string :");
    for(int i=0;i<5;i++){
        scanf("%c",&str[i]);

    }

    int len=strlen(str);
    printf("Original String :");
    for(int i=0;i<len;i++){
        printf("%c",str[i]);
    }
    printf("\n");

    printf("Reversed String :");
    for(int i=len-1;i>=0;i--){
        printf("%c",str[i]);
    }
    printf("\n");
    return 0;
}
```

```
PS C:\Users\AJIT\Desktop\C\Tests\Test8> cd "c:\Users\AJIT\Desktop\C\Tests\Te
st8\" ; if ($?) { gcc Q22.c -o Q22 } ; if ($?) { .\Q22 }
Enter string: ajit
Original String: ajit
Reversed String: tija
PS C:\Users\AJIT\Desktop\C\Tests\Test8> 
```