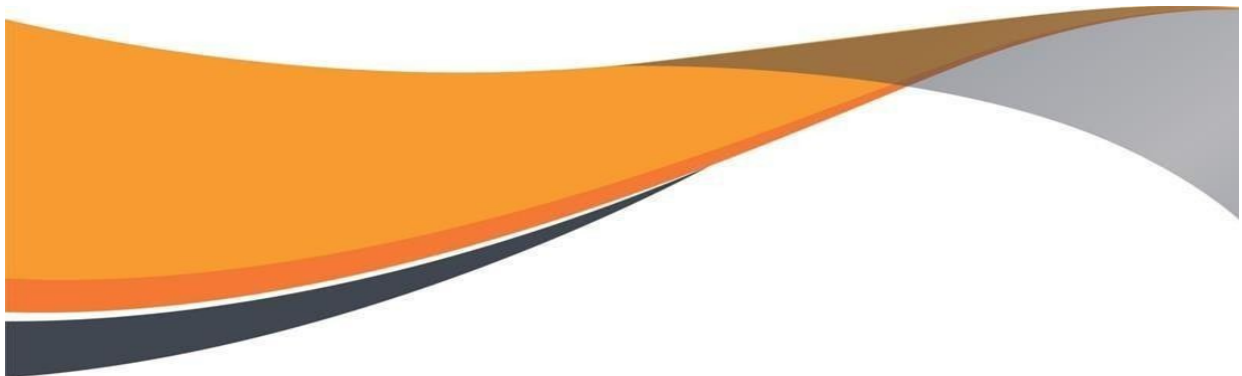


**ASSIGNMENT  
Submitted  
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**Model Institute Of Engineering & Technology  
(Autonomous)  
(Permanently Affiliated to the University of Jammu,  
Accredited by NAAC with “A” Grade)  
Jammu, India  
2024**



**Q1:- Write the C program for check the given string is in password validation.**

**Ans -**

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

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

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

```
int isPasswordValid(char *password)
```

```
{
```

```
    int length = strlen(password);
```

```
    if (length < 8)
```

```
    {
```

```
        return 0;
```

```
    }
```

```
    int hasUppercase = 0;
```

```
    for (int i = 0; i < length; i++)
```

```
    {
```

```
        if (isupper(password[i]))
```

```
        {
```

```
            hasUppercase = 1;
```

```
            break;
```

```
        }
```

```
}
```

```
if (!hasUppercase)
```

```
{
```

```
    return 0;
```

```
}
```

```
int hasLowercase = 0;
```

```
for (int i = 0; i < length; i++)
```

```
{
```

```
    if (islower(password[i]))
```

```
    {
```

```
        hasLowercase = 1;
```

```
        break;
```

```
    }
```

```
}
```

```
if (!hasLowercase)
```

```
{
```

```
    return 0;
```

```
}
```

```
int hasDigit = 0;
```

```
for (int i = 0; i < length; i++)
```

```

{
    if (isdigit(password[i]))
    {
        hasDigit = 1;
        break;
    }
}

if (!hasDigit)
{
    return 0;
}

return 1;
}

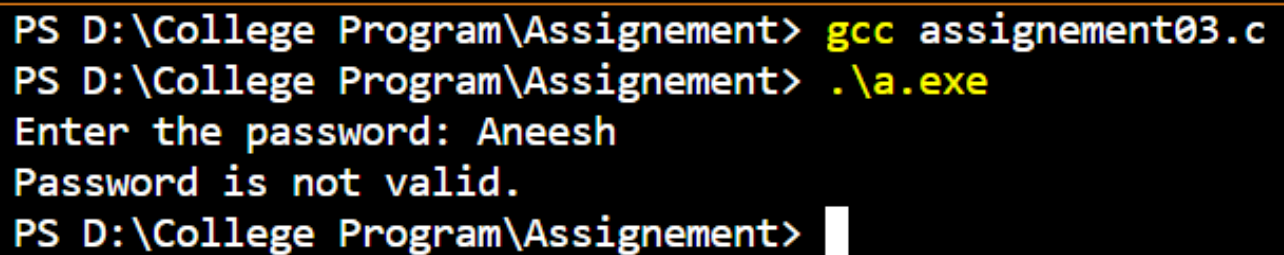
int main()
{
    char password[50];

    printf("Enter the password: ");
    scanf("%s", password);

    if (isPasswordValid(password))

```

```
{  
    printf("Password is valid.\n");  
}  
else  
{  
    printf("Password is not valid.\n");  
}  
  
return 0;  
}
```



```
PS D:\College Program\Assignment> gcc assignment03.c  
PS D:\College Program\Assignment> .\a.exe  
Enter the password: Aneesh  
Password is not valid.  
PS D:\College Program\Assignment> █
```

**Q2:- Write a C program to find the maximum and minimum element in an array.**

**Ans -**

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

```
void findMinMax(int arr[], int size, int *max, int *min)
```

```
{
```

```
*max = *min = arr[0];
```

```
for (int i = 1; i < size; ++i)
{
    if (arr[i] > *max)
    {
        *max = arr[i];
    }
    else if (arr[i] < *min)
    {
        *min = arr[i];
    }
}
```

```
int main()
```

```
{
```

```
    int size;
```

```
    printf("Enter the size of the array: ");
```

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

```
    int arr[size];
```

```
printf("Enter %d elements of the array:\n", size);
for (int i = 0; i < size; ++i)
{
    scanf("%d", &arr[i]);
}

int max, min;

findMinMax(arr, size, &max, &min);

printf("Maximum element: %d\n", max);
printf("Minimum element: %d\n", min);

return 0;
}
```

```
PS D:\College Program\Assignement> gcc assignement04.c
PS D:\College Program\Assignement> .\a.exe
Enter the size of the array: 5
Enter 5 elements of the array:
21
23
43
54
67
Maximum element: 67
Minimum element: 21
PS D:\College Program\Assignement> █
```