

Assignment 01:-

Write a program that converts a lowercase to uppercase and an uppercase character to lowercase. If the IP character is not a letter Print "Invalid IP"

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

```
void main()
```

```
{
```

```
    char c;
```

```
    printf("Enter a character:");
```

```
    scanf("%c", &c);
```

```
    if (c >= 'a' && c <= 'z')
```

```
    {
```

```
        c -= 32;
```

```
    }
```

```
    else if (c >= 'A' && c <= 'Z')
```

```
    {
```

```
        c += 32;
```

```
    }
```

```
    else
```

```
    {
```

```
        printf("Invalid input");
```

```
        return 0;
```

```
    }
```

```
    printf("Converted character: %c", c);
```

```
    return 0;
```

```
}
```

O/P:-
Enter a character: a
Converted character: A
Enter a character: b
Converted character: B
Enter a character: !
Invalid IP

Assignment 02:-

You have to Print the character 'h' in the first line & then Print '3' in the next line. In the last line Print Sentence.

```
#include <stdio.h>
int main()
{
    char ch;
    printf("Enter a character:");
    scanf("%c", &ch);
    printf("%c\n", 'S');
    printf("Sen\n");
    return 0;
}
```

O/P.

Enter a character: x

S.

Sen.

Assignment 03:-

Give a +ve integer denoting n, do the following of $1 \leq n \leq 9$, print the lowercase English word corresponding to the number. If $n > 9$, print greater than 9.

```
#include <stdio.h>
int main()
{
```

```
    int n;
```

```
    printf("Enter a +ve. integer:");
```

```

scanf ("%d", &n);
if (n >= 1 && n <= 9)
{
    switch (n)
    {
        case 1: printf ("one\n");
                break;
        case 2: printf ("two\n");
                break;
        case 3: printf ("three\n");
                break;
        case 4: printf ("four\n");
                break;
        case 5: printf ("five\n");
                break;
        case 6: printf ("six\n");
                break;
        case 7: printf ("seven\n");
                break;
        case 8: printf ("eight\n");
                break;
        case 9: printf ("nine\n");
                break;
    }
}
else {
    printf ("Greater than 9\n");
}
return 0;
}

```


op :-

Enter a positive integer: 5
five

Enter a positive integer: 20
greater than 9.

Assignment 58-

Condition :- $18 \leq \text{age} \leq 60$

$0 \leq \text{monthly-income} \leq 50000$.

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

```
int main()
```

```
{
```

```
    int age;
```

```
    float monthly-income;
```

```
    printf("Enter age (18-60): ");
```

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

```
    printf("Enter monthly-income (0-50000): ");
```

```
    scanf("%f", &monthly-income);
```

```
    if (age < 18 || age > 60 || monthly-income < 0 ||  
        monthly-income > 50000)
```

```
    {
```

```
        printf("Invalid input, please check the  
        age & income range");
```

```
    }
```

```
    else if (age >= 18 & age <= 25 & monthly-  
            income >= 25000)
```

```
    {
```

```
        printf("Loan eligible");
```

```
    }
```

```
    else if (age >= 26 & age <= 40 & monthly-  
            income >= 10000)
```

```
    {
```

```
printf("loan eligible");
{
```

```
else
```

```
{
```

```
printf("loan not eligible");
```

```
{
```

```
return 0;
```

```
}
```

```
01P
```

Enter age (18-60): 30

Enter monthly income (0-50000): 2000.

loan eligible.

Assignment 06:

Grade Evaluation System.

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

```
int main()
```

```
{
```

```
int score;
```

```
printf("Enter score (0-100):");
```

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

```
if (score < 0 || score > 100)
```

```
{
```

```
printf("Invalid score. Please enter between 0 & 100.");
```

```
}
```

```
else if (score >= 90)
```

```
{
```

```
printf("Grade: A");
```

```
}
```

```
else if (score >= 80)
```

```
{
```

printf("Grade: B");

else if (score >= 70)

printf("Grade: C");

else if (score >= 60)

printf("Grade: D");

else

printf("Grade: F");

return 0;

O/P

Enter score (0-100): 97 Enter score (0-100): 35

Grade: A

Grade: F

Enter score (0-100): 59

Grade: D

* Assignment 07:

For each integer n in interval $[a, b]$,

- if $1 \leq n \leq 9$ print english representation of n in lowercase
- $n > 9$ even no print even
- $n > 9$ odd no print odd

```
#include <stdio.h>
void print_representation (int a, int b)
{
    for (int n=a; n<=b; n++)
    {
        if (n>=1 && n<=9)
        {
            switch (n)
            {
                case 1: printf ("one\n");
                        break;
                case 2: printf ("Two\n");
                        break;
                case 3: printf ("Three\n");
                        break;
                case 4: printf ("four\n");
                        break;
                case 5: printf ("five\n");
                        break;
                case 6: printf ("Six\n");
                        break;
                case 7: printf ("Seven\n");
                        break;
                case 8: printf ("Eight\n");
                        break;
                case 9: printf ("nine\n");
                        break;
            }
        }
        else {
            if (n%2==0)
            {
                printf ("even\n");
            }
        }
    }
}
```



```
else {  
    printf("odd\n");  
}
```

```
}  
int main()
```

```
{  
    int a, b;  
    printf("Enter lower bound (a):");  
    scanf("%d", &a);  
    printf("Enter upper bound (b):");  
    scanf("%d", &b);  
    print_representation(a, b);  
    return 0;  
}
```

O/P:-

Enter lower bound (a): 8

Enter upper bound (b): 11

nine

even

odd

Assignment 8:-

Print Powers of 2 from 2 to 128 in separate lines using a while loop.

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

```
void main()
```

```
{
```

```
    int i = 1;
```

```
    while (i <= 128)
```

```
{
```

```
        printf("%d\n", i * 2);
```

```
        i * 2;
```

```
}
```

```
    return 0;
```

```
}
```

O/P.

2

4

8

16

32

64

128

Assignment : 9

Give 5 digit integer print sum of its digits (condition $\rightarrow 10000 < n < 99999$)

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

```
void main()
```

```
{
```

```
int n;
```

```
printf("Enter a 5 digit integer (10000-99999):");
```

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

```
if (n < 10000 || n > 99999)
```

```
{
```

```
printf("Invalid input. Please enter a 5-digit integer");
```

```
} return 0;
```

```
int sum = 0;
```

```
while (n != 0)
```

```
{
```

```
sum += n % 10;
```

```
n /= 10;
```

```
}
```

```
printf("Sum of digits: %d", sum);
```

```
return 0;
```

```
}
```

O/P

Enter a 5-digit integer (100000-99999): 105514

Sum of digits: 16.

Enter a 5-digit integer (10000-99999): 12345

Sum of digits: 15

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Assignment :- 10

~~Chf~~ want to write a code, with check
if Given number is Prime

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

```
int main()
```

```
{
```

```
int num;
```

```
printf("Enter a number : ");
```

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

```
if (num <= 1)
```

```
{
```

```
printf("No\n");
```

```
return 0;
```

```
}
```

```
int i = 2;
```

```
int is_Prime = 1;
```

```
while (i * i <= num)
```

```
{
```

```
if (num % i == 0)
```

```
{
```

```
is_Prime = 0;
```

```
break;
```

```
}
```

```
i++;
```

```
}
```

```
if (is_Prime)
```

```
{
```

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

```
}
```

```
else
```

```
{
```

```
printf("No\n");
```

```
}
```

Output 0;

```
{
```

O/P

Enter a number: 7

Yes

Enter a number: 10

No.