

1. check if a number is one digit, two digit, or an integer

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

```
int main() {
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    if (num >= 0 && num < 10) {
        printf("one digit\n");
    } else if (num >= 10 && num < 100) {
        printf("two digit\n");
    } else {
        printf("integer\n");
    }
    return 0;
}
```

Intput: Enter a number: 5

out.put: Onedigit

2. check if a year is a leap year

```
#include <stdio.h>

int main() {
    int year;
    printf("Enter a year: ");
    scanf("%d", &year);
    if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0))
        printf("%d is a leap year. In", year);
    else
        printf("%d is not a leap year. In", year);
    return 0;
}
```

Input:

Code Enter a year: 2024

Output:

2024 is a leap year.

3. check if a character is an alphabet, digit, or special character.

```
#include <stdio.h>

int main() {
    char ch;
    printf("Enter a character: ");
    scanf("%c", &ch);
    if ((ch >= 'a' & & ch <= 'z') || (ch >= 'A' & & ch <= 'Z')) {
        printf("It is an alphabet.\n");
    } else if (ch >= '0' & & ch <= '9') {
        printf("It is a digit.\n");
    } else {
        printf("It is a special character.\n");
    }
    return 0;
}
```

Input: Enter a character: @

Output: It is a special character.

4. Check if an alphabet is a vowel or a consonant.

```
#include <stdio.h>

int main(){
    char ch;
    printf("Enter an alphabet: ");
    scanf("%c", &ch);
    if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u' ||
        ch == 'A' || ch == 'E' || ch == 'I' || ch == 'O' || ch == 'U'){
        printf("%c is a vowel.\n", ch);
    } else {
        printf("%c is a consonant.\n", ch);
    }
    return 0;
}
```

Input : Enter an alphabet: B

Output : B is a consonant.

5. write a program to read the day number integers and display name in word formate.

```
#include<stdio.h>

int main() {
    int day;
    printf ("Enter a day number (1-7): ");
    scanf ("%d", &day);
    switch(day) {
        case 1:
            printf ("Sunday \n");
            break;
        case 2:
            printf ("Monday \n");
            break;
        case 3:
            printf ("Tuesday \n");
            break;
        case 4:
            printf ("Wednesday \n");
            break;
        case 5:
            printf ("Thursday \n");
            break;
        case 6:
            printf ("Friday \n");
            break;
        case 7:
            printf ("Saturday \n");
            break;
        default:
            printf ("Invalid day number.\n");
            break;
    }
    return 0;
}.
```

Output :

Enter a day number (1-7): 3

Tuesday.

Output :

Enter a day number (1-7): 9

Invalid day number.