

```

i) #include <stdio.h>
int main() {
    int number;
    printf("Enter a number:");
    scanf("%d", &number);

    if (number < 10) {
        printf("one digit");
    }

    return 0;
}

```

Output:
Enter a number:
one digit

```

ii) #include <stdio.h>
int main() {
    int number;
    printf("Enter a number:");
    scanf("%d", &number);

    if (number >= 10 && number < 100) {
        printf("two digit");
    }

    return 0;
}

```

Output:
Enter a num:
Two digit

```

iii) #include <stdio.h>
int main() {
    int number;
    printf("Enter a number:");
    scanf("%d", &number);

    if (number >= 10 && number < 100) {
        printf("Two digit\n");
    }
    else if (number < 10 && number >= 10) {
        printf("one digit\n");
    }
}

```

```

else {
    printf("Integers\n");
}
return 0;
}

```

Output:
Enter a number 5
one digit.

2) #include <stdio.h>

```
int main() {
```

```
    int year;
```

```
    printf("Enter a year");
```

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

```
    if ((year % 400 == 0) || (year % 4 == 0 && year % 100 != 0)) {
```

```
        printf("%d is a leap year.\n", year);
```

```
    } else {
```

```
        printf("%d is not a leap year.\n", year);
```

```
    }
```

```
    return 0;
```

```
}
```

Output:

Enter a year: 2024

2024 is a leap year.

Enter a year: 2023

2023 is not a leap year.

3) #include <stdio.h>

```
int main() {
```

```
    char ch;
```

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

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

```
    if ((ch >='a' && ch <='z') || (ch >='A' && ch <='Z')) {
```

```
        printf("'%.c' is an alphabet.\n", ch);
```

```
    } else if (ch >='0' && ch <='9') {
```

```

printf("%c is an digit.\n", ch);
}
else {
printf("%c is a Special character.\n", ch);
}
Return 0;
}

```

output

Enter a character: A

A is an alphabet.

Enter a character: 5

5 is a digit

Enter a character: @

@ is a Special character.

4) #include <stdio.h>

```
int main() {
```

```
char ch;
```

```
printf("Enter an alphabet:");
```

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

```
// check if the character is an alphabet
```

```
if ((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z')) {
```

```
// check for vowels.
```

```
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);
```

```
}
```

```
} else {
```

```
printf("%c is not an alphabet.\n", ch);
```


Return 0;

}

Output:-

Enter an alphabet: A

A is a vowel

Enter an alphabet: z

z is a consonant.

Enter an alphabet: s

s is not an alphabet.

5) #include <stdio.h>

int main() {

int day;

printf("Enter 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 ! please enter a number  
between 1 and 7:\n");
```

```
}
```

```
return 0;
```

```
}
```

output:

Enter day number (1-7): 3

Tuesday,