

① (i)

```
#include <stdio.h>
int main() {
    int num;
    printf("Enter a number:");
    scanf("%d", &num);
    if(num<10) {
        printf("one digit\n");
    } else if(num >= 10 && num < 100) {
        printf("Two digits\n");
    } else {
        printf("Integer\n");
    }
    return 0;
}
```

Output :-

{ Enter a number : 4
one digit }

(ii) #include <stdio.h>

```
int main() {
    int num;
    printf("Enter a number:");
    scanf("%d", &num);
    if(num < 10) {
        printf("One digit\n");
    }
}
```

```
else if (num >= 10 & num < 100) {  
    printf ("Two digits \n");  
}  
printf ("Integers");  
return 0;  
}
```

Output :-

```
{Enter a number : 45  
Two digits}
```

Q) \Rightarrow #include <stdio.h>

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

Output:-

{
Enter a year: 2025
2025 is not a leap year}

③

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

```
int main() {
```

```
char ch;
```

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

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

```
if (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;
```

```
}
```

Output:-

{
Enter any character: a
It is an alphabet}

{
Enter any character: @
It is a special character}

Enter any character : 5
It is a digit

④ #include <stdio.h>
int main () {
 char ch;
 printf ("Enter any alphabet : ");
 scanf ("%c", &ch);
 if (ch >= 'a' & ch <= 'z') || (ch >= 'A' & ch <= 'Z')
 {
 { ; ("a/ vowel") }
 if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u')
 ch == 'A' || ch == 'E' { (ch == 'i') || (ch == 'O') || (ch == 'U'))
 printf ("it is a vowel \n"); }
 else {
 printf ("it is a consonant \n"); }
 }
 else {
 printf ("it is not an alphabet \n"); }
 return 0;
}

Output

Enter any alphabet : s
It is a constant.

⑤

```
#include <stdio.h>
int main () {
    int day;
    printf ("Enter day number (1-7): ");
    scanf ("%d", &day);
    if (day == 1) {
        printf ("Sunday\n");
    } else if (day == 2) {
        printf ("Monday\n");
    } else if (day == 3) {
        printf ("Tuesday\n");
    } else if (day == 4) {
        printf ("Wednesday\n");
    } else if (day == 5) {
        printf ("Thursday\n");
    } else if (day == 6) {
        printf ("Friday\n");
    } else {
        printf ("Invalid day number! Please enter between 1 and 7\n");
    }
    return 0;
}
```

Output :-

Int a day number (1-7) : 3

Tuesday.