

FRIDAY

JAN '20

17

WK-03 017-349

Char →

signed → 1 byte → $\frac{2^8}{2} = \left[\frac{256}{2} \right]$
 * -128 to 127

unsigned → 1 byte → 28
 * 0 to 255.

Program

```
#include < >
int main()
{
    int a = 10;
}
```

text.c

Char System

Compiler

Number System

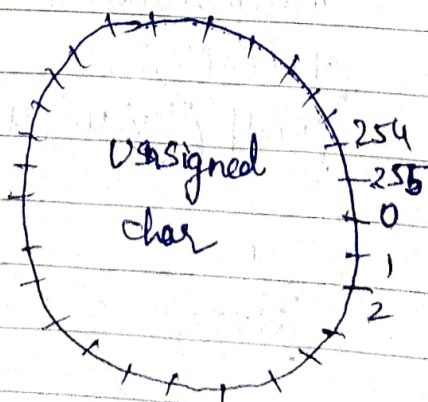
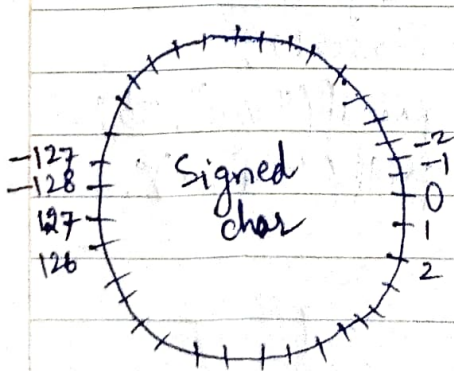
1111
1011
1101
1001
1010

ASCII (American Standard Code for Information Interchange) →

A - 65	a - 97	0 - 48	# - 35
B - 66	b - 98	1 - 49	space - 32
⋮	⋮	⋮	⋮
z - 90	z = 122	9 - 57	!
26	28	10	150

26
26
10
150
252 < 256
8bit

• for every character, digit and special symbol is represented by constant integer value.



```
int main()
{
```

```
    char ch = 'A';
    printf("%c", ch);
    printf("%d", ch);
}
```

```
int main()
```

```
{
```

```
char ch = 258;
```

```
printf("%d", ch); → ?
```

```
printf("%c", ch);
```

```
↓
```

```
ch
```

```
[2]
```

unknown
character

Q. WAP to display ASCII value of character.

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

```
int main()
```

```
{
```

```
char ch;
```

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

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

```
printf("ASCII value is : %d", ch);
```

```
}
```

Q. WAP to convert lower case to upper case.

```
ch = ch - 32;
```

Q. WAP to convert any upper case character in lower case.

Q. WAP to convert any digit character into integer.

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

```
int main()
```

```
{
```

```
char ch;
```

```
printf("Enter any char in upper case");
```

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

```
ch = ch + 32;
```

```
printf("In lower case : %c", ch);
```

```
}
```

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

```
int main()
```

```
{
```

```
int x; char ch;
```

```
printf("Enter any digit char");
```

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

```
x = ch - 48;
```

```
printf("In Integer = %d", x);
```

```
}
```