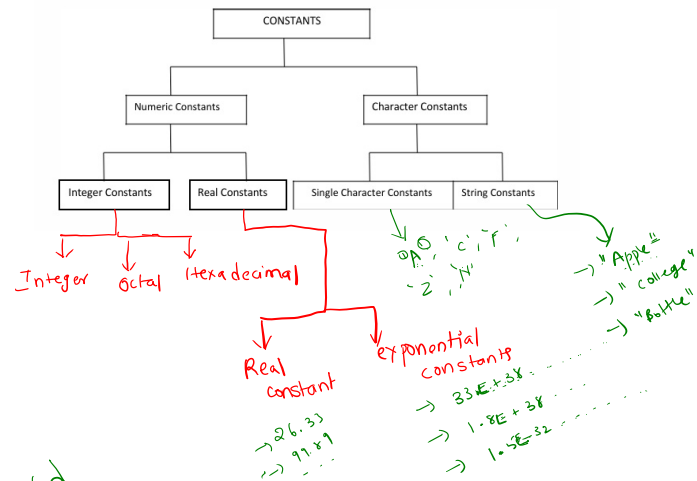
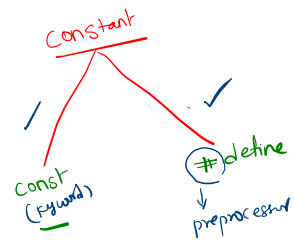


Constants
 ↳ value which we cannot change
 value(s) data which we can change
 ↳ not a constant

C language
 ↳ 32
C Struct
no of sections



Integer: Base value: 10 [0-9]
 Ex: 99, 100, 35, 29, 94, ...

Octal: Base value: 8 [0-7]
 Ex: 028, 026, 031, 093, 056, 025

Hexadecimal: Base value: 16 [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F]
 Ex: 0x1A2, 0x1A, 0xBC, 0x29C ...

Example ⇒ Conversions

- Octal ⇌ Decimal
- Hexadecimal ⇌ Decimal

main.c

```
1
2 #include <stdio.h>
3 int main()
4 {
5     int a;
6     printf("Enter your Decimal value :");
7     scanf("%x",&a);
8     printf("%d",a);
9     return 0;
10 }
```

$$(0x1A2)_{16} \Rightarrow (???)_{10}$$
$$16^0 \times 2 + 16^1 \times 10 + 16^2 \times 1$$
$$2 + 160 + 256$$
$$= 418$$

input

Enter your Decimal value :0x1A2

418

main.c

```
1
2 #include <stdio.h>
3 int main()
4 {
5     int a = 026;
6     printf("%d",a);
7     return 0;
8 }
```

a (octal)
026
Octal $8(026) \Rightarrow$ decimal $_{10}(?)$
 $8^0 \times 6 + 8^1 \times 2$
 $1 \times 6 + 16$
 $= 22$

22

main.c

```
1
2  #include <stdio.h>
3  int main()
4  {
5      int a;
6      printf("Enter your octal value :");
7      scanf("%o",&a);
8      printf("%d",a);
9      return 0;
10 }
```



input

```
Enter your octal value :0226
150
```

main.c

```
1
2  #include <stdio.h>
3  int main()
4  {
5      int a;
6      printf("Enter your Decimal value :");
7      scanf("%d",&a);
8      printf("%o",a);
9      return 0;
10 }
```



input

Enter your Decimal value :150

226

