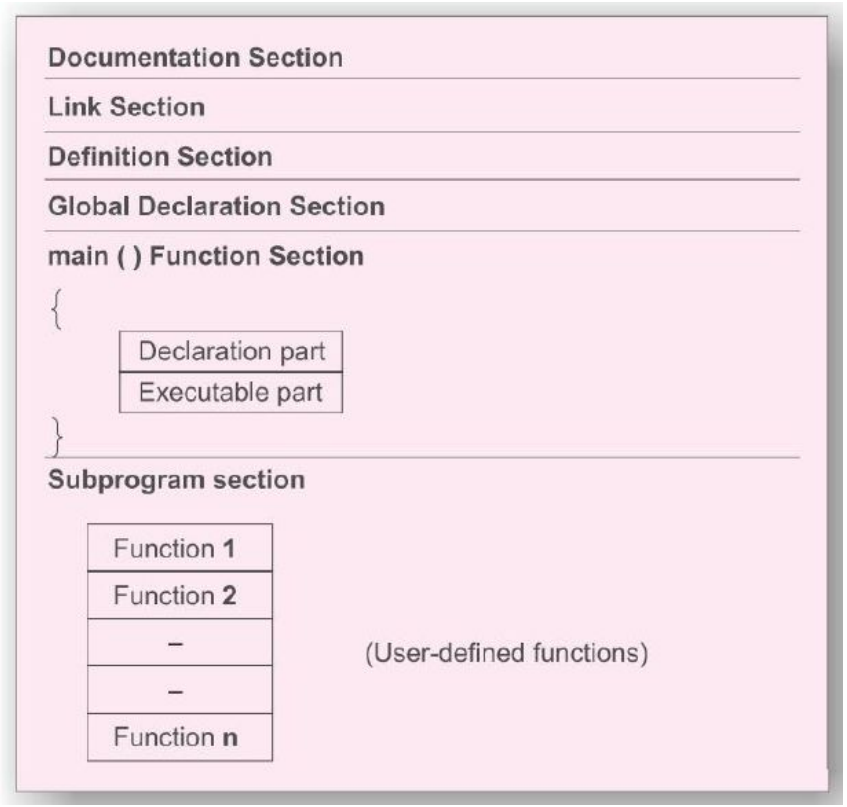
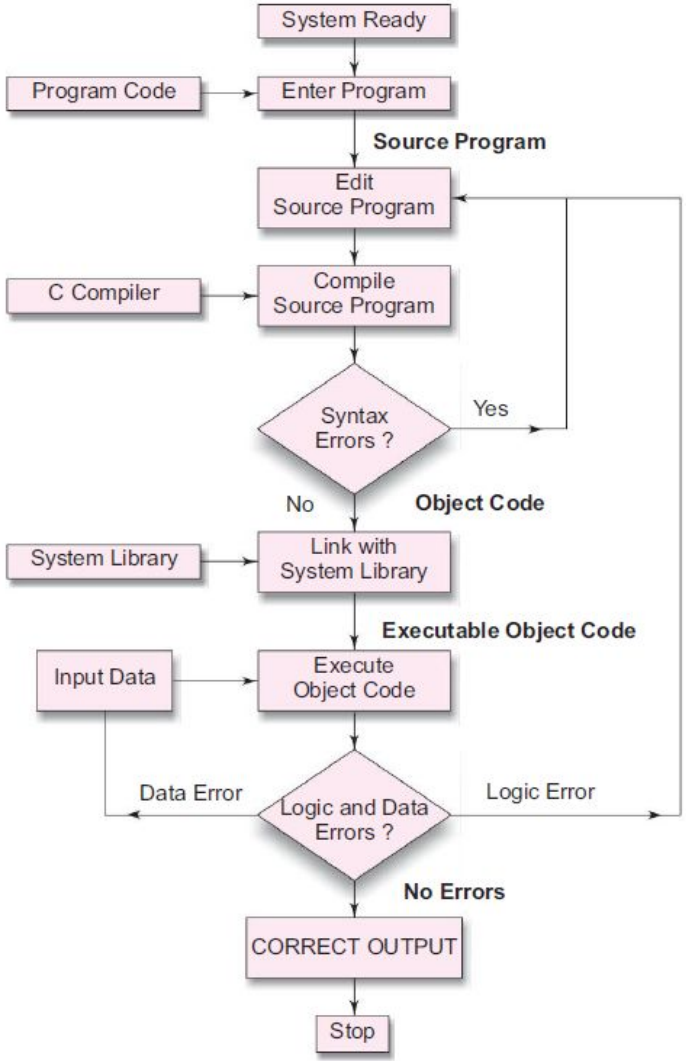
Basic Structure



Execution Sequence



Distance conversion

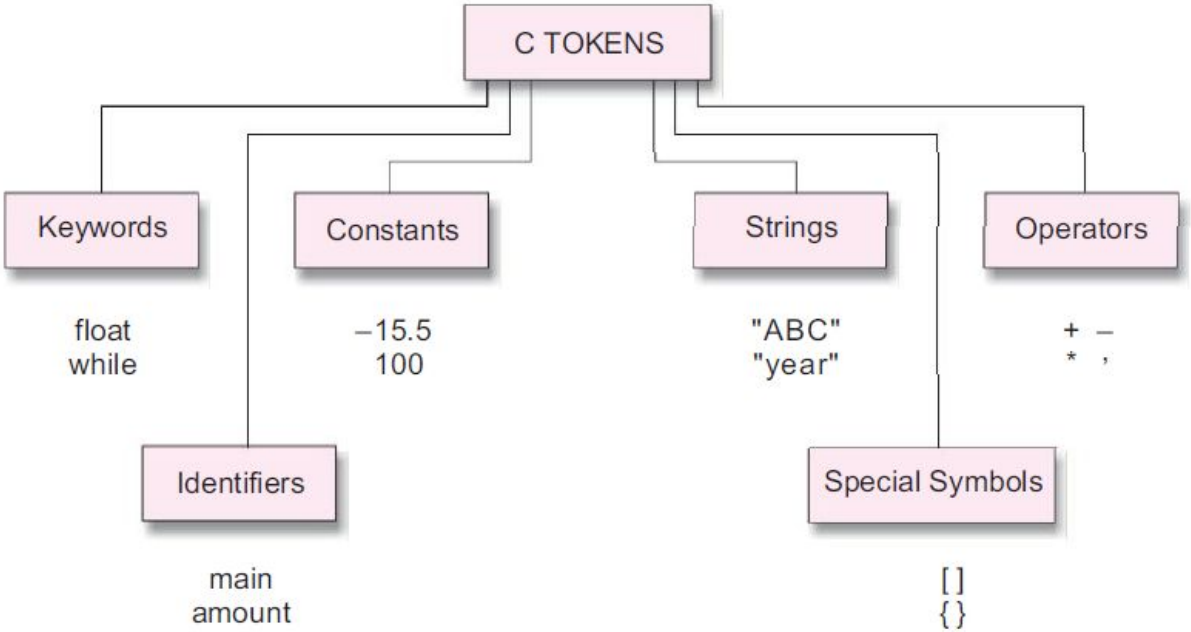
```
#include<stdio.h>
int main() {
        float km = 1;
        float meters;
        printf(“Distance in km: %5.2f \n”, km);
        meters = km * 1000;
        printf(“Distance in meters: %5.2f \n”, meters);
        return 0;
}
```

```
#include<stdio.h>
int main() {
        float km, meters;
        printf(“Enter Distance in km:\n”);
        scanf(“%f”, &km);
        meters = km * 1000;
        printf(“Distance in meters: %5.2f \n”, meters);
        return 0;
}
```

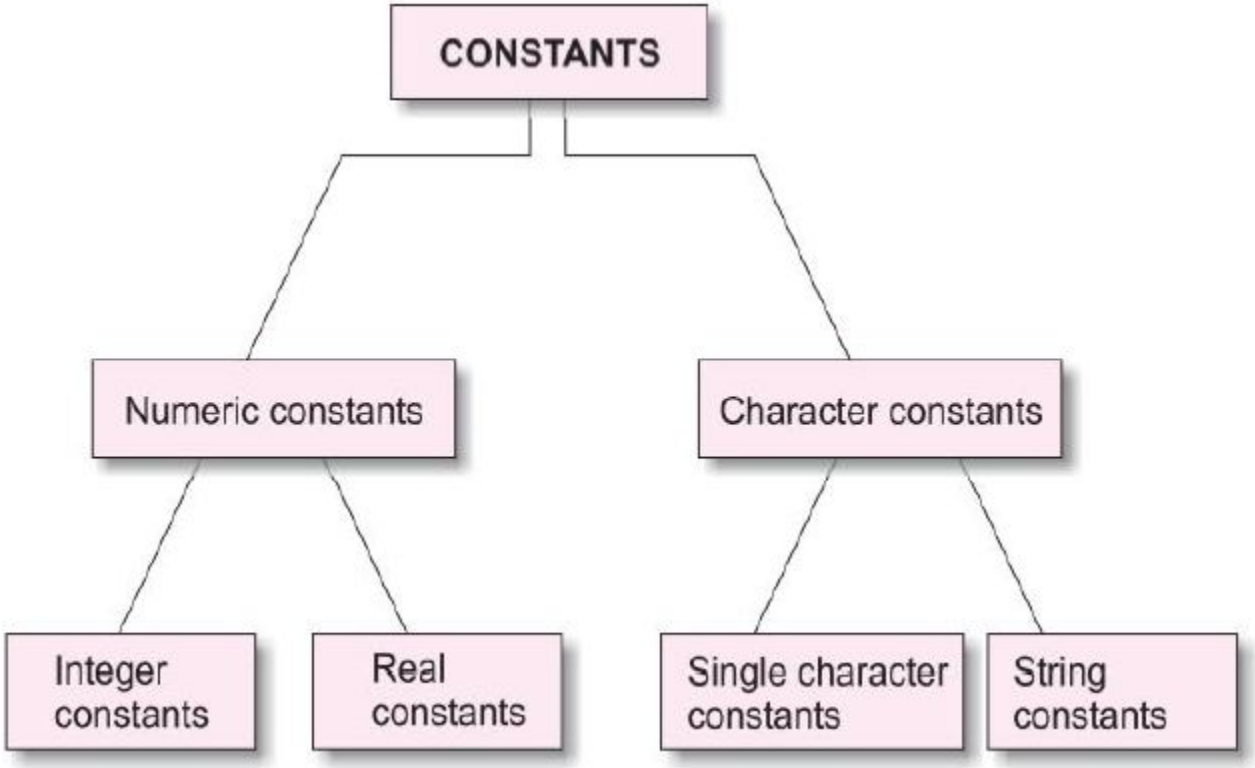
Calculate Simple Interest

```
#include<stdio.h>
int main() {
        float principle, rate, time, simpleInt;
        printf(“Enter principle, rate, and time respectively:\n”);
        scanf(“%f %f %f”, &principle, &rate, &time);
        simpleInt = (principle * rate * time)/100;
        printf(“Simple Interest: %5.2f \n”, simpleInt);
        return 0;
}
```

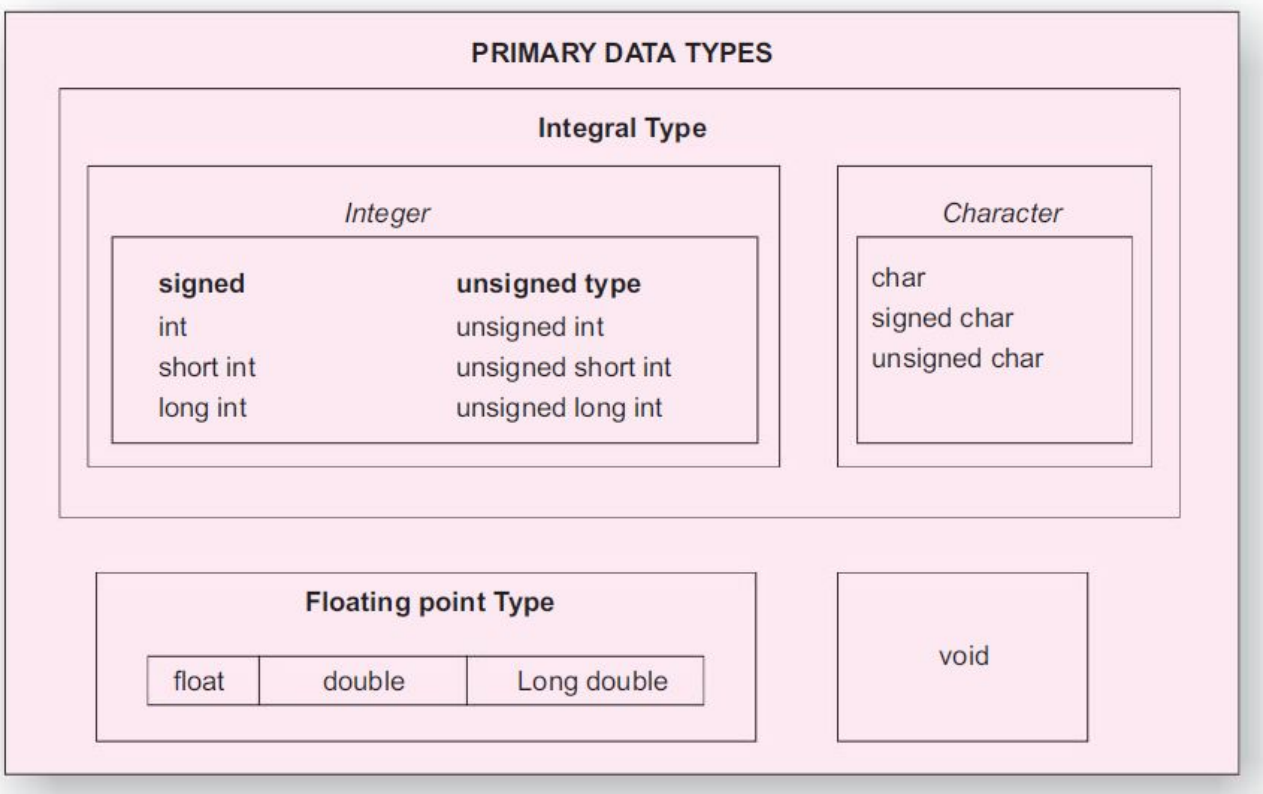
C Tokens


C TOKENS
Keywords
float
while
Constants
–15.5
100
Strings
"ABC"
"year"
Operators
+ –
* ,
Identifiers
main
amount
Special Symbols
[ ]
{ }

Constants


CONSTANTS
Numeric constants
Character constants
Integer constants
Real constants
Single character constants
String constants

Data Types


PRIMARY DATA TYPES
Integral Type
Integer
signed
int
short int
long int
unsigned type
unsigned int
unsigned short int
unsigned long int
Character
char
signed char
unsigned char
Floating point Type
float
double
Long double
void

Range

Data type	*Range of values*
char	–128 to 127
int	–32,768 to 32,767
float	3.4e–38 to 3.4e+e38
double	1.7e–308 to 1.7e+308