Feel the programs - very basic

CHAPTER 9

Write your first C program in IDE

- Write a program to print below message to the console in the same format

```
Welcome to suresh techs, I am learning C Programming
```

```c
//Author: Suresh
#include<stdio.h>
int main(){
    /*This program is used to display
    simple text message*/
    printf("Welcome to suresh techs, I am learning C Programming");
}
```

Write your second program

```
Welcome to suresh techs, I am learning C Programming
Thank you suresh techs, taggede le
I will subscribe suresh techs channel!
```

```c
//Author: Suresh
#include<stdio.h>
int main(){
    /*This program is used to display
    simple text message*/
    printf("Welcome to suresh techs, I am learning C Programming\n");
    printf("Thank you suresh techs, taggede le\n");
    printf("I will subscribe suresh techs channel!\n");
}
```

Escape sequences

- Sequence of characters that doesn't represent itself when used inside string
- It is composed of two or more characters starting with backslash \
- Ex: **\n** represents new line.

Escape sequence	Meaning
\a	Alarm or Beep
\b	Backspace
\f	Form feed
\n	New line
\r	Carriage return
\t	Horizontal tab
\v	Vertical tab
\\	Backslash
\'	Single quote
\"	Double quote
\?	Question mark
\nnn	Octal number
\xhh	Hexadecimal number
\0	Null

Write your third program

```
Welcome to suresh techs, "I am learning" C Programming
Thank you suresh techs, taggede le
I will subscribe suresh techs channel!
```

```c
//Author: Suresh
#include<stdio.h>
int main(){
    /*This program is used to display
    simple text message*/

    printf("Welcome to suresh techs, \"I am learning\" C
        Programming\n");
    printf("Thank you suresh techs, taggede le\n");
    printf("I will subscribe suresh techs channel!\n");

}
```

Optimize our code with Macros

```c
//Author: Suresh
#include<stdio.h>
#define CHANNEL_NAME "suresh techs"
int main(){
    /*This program is used to display
    simple text message*/

    printf("Welcome to %s, \"I am learning C\" Programming\n"
        ,CHANNEL_NAME);
    printf("Thank you %s taggede le\n",CHANNEL_NAME);
    printf("I will subscribe %s channel!\n",CHANNEL_NAME);
}
```

Understand the use of macros

- If you want to change the name suresh techs to suresh techs youtube channel 🤔

- Just change at one place, instead of changing everywhere 😍

Macro

- Macro definitions **cannot be changed by your program code like variables.**

- use macros when creating constants that represent numbers, strings or expressions.

- Don't end them with **;** like statements

- #define CNAME value

Define AGE macro

```c
//Author: Suresh
#include<stdio.h>
#define CHANNEL_NAME "suresh techs"
#define AGE 26
int main(){
    /*This program is used to display
    simple text message*/

    printf("Welcome to %s, \"I am learning C\" Programming\n"
        ,CHANNEL_NAME);
    printf("Thank you %s taggede le\n",CHANNEL_NAME);
    printf("I will subscribe %s channel!\n",CHANNEL_NAME);
    printf("My age is %d",AGE);
}
```

```
Welcome to suresh techs, "I am learning C" Programming
Thank you suresh techs taggede le
I will subscribe suresh techs channel!
My age is 26
```

Let's understand program execution

```c
//Author: Suresh
#include<stdio.h>
#define CHANNEL_NAME "suresh techs"
#define AGE 26
int main(){
    /*This program is used to display
    simple text message*/

    printf("Welcome to \"%s\", \"I am learning C\" Programming\n"
        ,CHANNEL_NAME);
    printf("Thank you \"%s\" taggede le\n",CHANNEL_NAME);
    printf("I will subscribe \"%s\" channel!\n",CHANNEL_NAME);
    printf("My age is %d",AGE);
}
```
Or we can use **EXIT_SUCCESS** from stdlib.h header file

https://code.woboq.org/qt5/include/stdlib.h.html

Let's understand this program

```c
//Author: Suresh
#include<stdio.h>
#define CHANNEL_NAME "suresh techs"
#define AGE 26
int a = 10;
int b = 20;
int main(){
    /*This program is used to display
    simple text message*/

    printf("Welcome to \"%s\", \"I am learning C\" Programming\n"
        ,CHANNEL_NAME);
    printf("Thank you \"%s\" taggede le\n",CHANNEL_NAME);
    printf("I will subscribe \"%s\" channel!\n",CHANNEL_NAME);
    printf("My age is %d\n",AGE);
    int sum = getSum();
    printf("Sum is: %d\n",sum);
    printf("My sum is: %d",a+b);
    return 0;
}


int getSum(){
    int sum = a+b;
    return sum;
}
```

} → global declaration

What we learned?

- Escape sequences
- Macros
- Programming is very easy – fun – with suresh techs channel 😍

What next?

- Structure of C program