

# Decision Control In C Programming:

1. Decision Control Instruction(if, else, nested if, nested if-else, (exp1)?exp2:exp3)
2. Iterative Control Instruction (Loop Or Repetitive Control Instruction) (while, do while, for)
3. Switch Case Control Instruction (switch, case)
4. Goto Control Instruction (goto)
5. Continue and Break Instruction

## If Else Statement:

If and else keyword is used for conditional statement. Where we can decide whether a particular statement will be executed by compiler or not.

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

int main()
{
    int i;

    printf("Enter Value Of I : ");
    scanf("%d", &i);

    if(i >= 10)
        printf("Value : %d", (i * 10));

    getch();
}
```

E:\C CODE\DemoC.exe

Enter Value Of I : 20  
Value : 200

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

int main()
{
    int i;

    printf("Enter Value Of I : ");
    scanf("%d", &i);

    if(i >= 10)
        printf("Value : %d", (i * 10));

    getch();
}
```

E:\C CODE\DemoC.exe

Enter Value Of I : 2

-----  
Process exited after 8.121 seconds with return value 0  
Press any key to continue . . .

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

int main()
{
    int i;

    printf("Enter Value Of I : ");
    scanf("%d", &i);

    if(i >= 10)
    {
        printf("Value : %d", (i * 10));
    }
    else
    {
        printf("Value : %d", (i * 20));
    }

    getch();
}
```

E:\C CODE\DemoC.exe

Enter Value Of I : 12  
Value : 120

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

int main()
{
    int i ;

    printf("Enter Value Of I : ");
    scanf("%d", &i);

    if(i >= 10)
    {
        printf("Value : %d", (i * 10));
    }
    else
    {
        printf("Value : %d", (i * 20));
    }
    getch();
}
```

E:\C CODE\DemoC.exe

Enter Value Of I : 9  
Value : 180

## Nested If & Nested If Else Statement:

Nested if and nested if else define if you want more decision for execution of a statement then we used nested if and nested if else.

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

int main()
{
    int i ;

    printf("Enter Value Of I : ");
    scanf("%d", &i);

    if(i > 50)
    {
        if(i % 2 == 0)
        {
            printf("value Of %d * 40 : %d", i, (i * 40));
        }
    }
    getch();
}
```

E:\C CODE\DemoC.exe

Enter Value Of I : 51

-----  
Process exited after 8.787 seconds with return value 0  
Press any key to continue . . .

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

int main()
{
    int i ;

    printf("Enter Value Of I : ");
    scanf("%d", &i);

    if(i > 50)
    {
        if(i % 2 == 0)
        {
            printf("value Of %d * 40 : %d", i, (i * 40));
        }
    }
    getch();
}
```

E:\C CODE\DemoC.exe

Enter Value Of I : 54  
value Of 54 \* 40 : 2160

```

#include <stdio.h>
#include <conio.h>

int main()
{
    int i ;

    printf("Enter Value Of I : ");
    scanf("%d", &i);

    if(i > 50)
    {
        if(i % 2 == 0)
        {
            printf("value Of %d * 40 : %d", i, (i * 40));
        }
        else
        {
            printf("value Of %d * 30 : %d", i, (i * 30));
        }
    }
    getch();
}

```

E:\C CODE\DemoC.exe

Enter Value Of I : 53  
value Of 53 \* 30 : 1590

-----  
Process exited after 12.46 seconds with return value 0  
Press any key to continue . . .

```

#include <stdio.h>
#include <conio.h>

int main()
{
    int i ;

    printf("Enter Value Of I : ");
    scanf("%d", &i);

    if(i > 50)
    {
        if(i % 2 == 0)
        {
            printf("value Of %d * 40 : %d", i, (i * 40));
        }
        else
        {
            printf("value Of %d * 30 : %d", i, (i * 30));
        }
    }
    getch();
}

```

E:\C CODE\DemoC.exe

Enter Value Of I : 56  
value Of 56 \* 40 : 2240

-----  
Process exited after 43.64 seconds with return value 0  
Press any key to continue . . .

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

int main()
{
    int i ;

    printf("Enter Value Of I : ");
    scanf("%d",&i);

    if(i > 50)
    {
        if(i % 2 == 0)
        {
            printf("value Of %d * 40 : %d",i,(i * 40));
        }
        else
        {
            printf("value Of %d * 30 : %d",i,(i * 30));
        }
    }
    else
    {
        if(i % 3 == 0)
        {
            printf("value Of %d * 50 : %d",i,(i * 50));
        }
        else
        {
            printf("value Of %d * 20 : %d",i,(i * 20));
        }
    }

    getch();
}
```

```
E:\C CODE\DemoC.exe
Enter Value Of I : 25
value Of 25 * 20 : 500
-----
Process exited after 12.79 seconds with return value 0
Press any key to continue . . .
```

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

int main()
{
    int i ;

    printf("Enter Value Of I : ");
    scanf("%d",&i);

    if(i > 50)
    {
        if(i % 2 == 0)
        {
            printf("value Of %d * 40 : %d",i,(i * 40));
        }
        else
        {
            printf("value Of %d * 30 : %d",i,(i * 30));
        }
    }
    else
    {
        if(i % 3 == 0)
        {
            printf("value Of %d * 50 : %d",i,(i * 50));
        }
        else
        {
            printf("value Of %d * 20 : %d",i,(i * 20));
        }
    }

    getch();
}
```

```
E:\C CODE\DemoC.exe
Enter Value Of I : 27
value Of 27 * 50 : 1350
-----
Process exited after 12.9 seconds with return value 0
Press any key to continue . . .
```

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

int main()
{
    int i ;

    printf("Enter Value Of I : ");
    scanf("%d",&i);

    (i > 30)?printf("value %d * 30 : %d",i,i * 20):printf("value %d * 40 : %d",i,i * 40);

    getch();
}
```

```
E:\C CODE\DemoC.exe
Enter Value Of I : 25
value 25 * 40 : 1000
```

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

int main()
{
    int i ;

    printf("Enter Value Of I : ");
    scanf("%d",&i);

    (i > 30)?printf("value %d * 30 : %d",i,i * 20):printf("value %d * 40 : %d",i,i * 40);

    getch();
}
```

```
E:\C CODE\DemoC.exe
Enter Value Of I : 36
value 36 * 30 : 720
-----
Process exited after 15.18 seconds with return value 0
Press any key to continue . . .
```