Switch is faster as compare to If else ladder

Task

Ask for input

If 10 print good

If 20 print bad

If 30 print ugly

If other print invalid

With if else ladder

#include<stdio.h>

int main(){

int x;

printf("Enter a number: ");

scanf("%d", &x);

if (x==10)

{

printf("Good");

}else{

if (x==20)

{

printf("bad");

}else{

if (x==30)

{

printf("Ugly");

}else{

printf("Invalid Input");

}

}

}

return 0;

}

With switch

#include<stdio.h>

int main(){

int x;

printf("Enter a number: ");

scanf("%d", &x);

switch (x)

{

case 10:

printf("Goods");

case 20:

printf("Bads");

case 30:

printf("Uglys");

default:

printf("Invalid Inputs");

}

return 0;

}

But Output is not as expected in above code.

Output:

/\*

OUtput:

C:\025-switchCase>eg

Enter a number: 50

Invalid Inputs

C:\025-switchCase>eg

Enter a number: 30

Uglys

Invalid Inputs

C:\025-switchCase>eg

Enter a number: 10

Goods

Bads

Uglys

Invalid Inputs

\*/

When we are giving any value, its going to the control but all next condition are also working

In short

Once any of the condition got satisfied then it will run all the statements unless it will not get break keyword.

#include<stdio.h>

int main(){

int x;

printf("Enter a number: ");

scanf("%d", &x);

switch (x)

{

case 10:

printf("Goods\n");

break;

case 20:

printf("Bads\n");

break;

case 30:

printf("Uglys\n");

break;

default:

printf("Invalid Inputs");

}

return 0;

}

/\*

OUtput:

C:\025-switchCase>eg

Enter a number: 50

Invalid Inputs

C:\025-switchCase>eg

Enter a number: 30

Uglys

C:\025-switchCase>eg

Enter a number: 10

Goods

\*/

Default is optional.

In old compiler it was mandatory to end default in last

But in new compiler it allow us to write default anywhere.

But if you are giving default anythere other then ending then you have to put break keyword in tt. Otwher it will print the code unless it will not get break.