# The "switch" Statement

Syntax

```
switch ( var_name )
{
  case value :
          =
          =
          =
          break;
case value :
          =
          =
          =
          break;
  .
  .
default :
          =
          =
}
```

```
if ( a == 1 )
    printf ("Monday");
else if (a == 2)
    printf ("Tuesday");
else if (a == 3)
    printf ("Wednesday");
  .
  .
else  printf ("Wrong inp");
```

```
switch ( a )
{
   case 1 :
          printf ("Monday");
          break;
  case 2 :
    .     printf ("Tuesday");
    .     break;
    .
  default: printf ("Wrong inp");
}
```

WAP to design a mini calculator. Your code should ask the user to input 2 integers. Then it should again ask the user to select an operation amongst addition, subtraction, multiplication and division. Finally acc to the user's choice it should perform the desired operation.

SAMPLE OUTPUT:

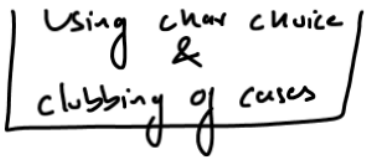
```
===============
Enter 2 int:
10 5

Select an operation:
1. Add
2. Subtract
3. Multiply
4. Divide

Enter your choice: 3
Mult is 50
```

```
#include <stdio.h>
#include <conio.h>
void main()
{
 int a,b;
 int choice;
 clrscr();
 printf("Enter 2 int:");
 scanf("%d %d",&a,&b);
 printf("Select an operation:");
 printf("\n1.Add\n2.Subtract\n3.Multiply
\n4.Divide");
 printf("\nEnter your choice:");
 scanf("%d",&choice);

 switch(choice)
 {
    case 1:
            printf("Sum is %d",a+b);
            break;
    case 2:
            printf("Subtraction is %d",a-b);
            break;
case 3:
            printf("Multi is %d",a*b);
            break;
case 4:
            printf("Div is %f",(float)a/b);
            break;
default:
             printf("Wrong choice");
 }
getch();
}
```

```
#include <stdio.h>
#include <conio.h>
void main()
{
  int a,b;
  int choice;
  clrscr();
  printf("Enter 2 int:");
  scanf("%d %d",&a,&b);
  printf("Select an operation:");
  printf("\n1.Add\n2.Subtract\n3.Multiply
\n4.Divide");
  printf("\nEnter your choice:");
  scanf("%d",&choice);

  switch(choice)
  {
     case 1:
              printf("Sum is %d",a+b);

     case 2:
              printf("Subtraction is %d",a-b);
```


```
case 3:
              printf("Mulit is %d",a*b);

case 4:
              printf("Div is %f",(float)a/b);

default:
               printf("Wrong choice");
 }
getch();
}
```

```
#include <stdio.h>
#include <conio.h>
void main()
{
  int a,b;
  char choice;
  clrscr();
  printf("Enter 2 int:");
  scanf("%d %d",&a,&b);
  printf("Select an operation:");
  printf("\nA.Add\nS.Subtract\nM.Multiply\nD.Divide");
  printf("\nEnter your choice:");
  fflush(stdin);
  scanf("%c",&choice);
  switch(choice)
  {
     case 'A': case 'a':
              printf("Sum is %d",a+b);
              break;
     case 'S': case 's':
              printf("Subtraction is %d",a-b);
              break;
```




```
     case 'M':
     case 'm':
              printf("Mulit is %d",a*b);
              break;
     case 'D':
     case 'd':
              printf("Div is %f",(float)a/b);
              break;
     default:
               printf("Wrong choice");
  }
  getch();
  }
```

# Restrictions On "switch"

① ✓ case 1:
=
=
-

✓ case 'A':
=
=
-

X case 1.0:
=
=
=
-

② ✓ case 'A':
=
=
=
-

X case "Add":
=
=
=
-

(3)

✓ Case 1:

=
=
=

✓ Case 2:

=
=
=

✗ Case 1:

=
=
=

(4)

✓ Case 2+3:

=
=
=

✓ Case 4-1:

=
=

✓ Case 10/5:

=
=

✗ Case 6/3.0:

=
=

⑤

✓ case 1:
=
=

✓ case 2:
=
=
=
=

int x=1, y=2;

.
.
.

case x: X
=
=
=
=

case y: =
=
=
X

⑥

✓ case 1 > 2:
=
=
=

X case a > 5:
=
=
=

X case 3 > 4:
=
=
=

X case 5 < 4:
=
=
=

✓ case 7 > 6:
=

Assignment:
=========
Which statement amongst **if** and **switch** is better and why ?