Lecture - 9

switch: The switch statement is used to test multi way decisions that tests whether an expression matches one of a number of constants. When a match is found a statement/ block of element is executed.

```
switch (expressions)
{
        case constexp1:
                statements
                break ;
        case constexp2:
                statements
                break ;
                .
                .
                .
        case constexpN:
                statements
                break ;
        default:
                statements
}
```

Example 1:

```
void main(void)
{
        int x ;
        scanf("%d",&x);
        switch(x)
        {
                case 1 : printf("One\n");
                         break ;
                case 2 : printf("Two\n");
                         break ;
                case 3 : printf("Three\n");
                         break ;
                default : printf("Other\n");
        }
}
```

```
3
Three
```

Example 2:

```
void main(void)
{
        char c ;
        scanf("%c",&c);
        switch(c)
        {
                case 'a' : printf("Vowel\n");
                           break ;
                case 'e' : printf("Vowel\n");
                           break ;
                case 'i' : printf("Vowel\n");
                           break ;
                case 'o' : printf("Vowel\n");
                           break ;
                case 'u' : printf("Vowel\n");
                           break ;
                default : printf("Consonent\n");
        }
}
```

P
consonent

Nested switch: We can use switch statement within a switch statement which is called nested switch.

Example:

```
switch(x)
{
        case 0 :
                switch(y)
                {       case 1: printf(" … ");
                                break ;
                        case 2 : printf(" … ");
                                break ;
                        default : printf(" … ");
                }
        case 1 :
                switch(z)
                {       case 0: printf(" … ");
                                break ;
                        case 1 : printf(" … ");
                                break ;
                        default : printf(" … ");
                }
        break ;
        default : printf(" … ");
}
```

break statement: break statement has two uses: The first is to terminate a case in the switch block and the second is to force immediate termination of a loop.

Example :

```
void main(void)
{
        int i ;
        for (i=1; i<=100; i + +)
        {
            printf("%d",i);
            if (i = = 10)
                break ;
        }
}
```

12345678910

continue statement: Continue forces next iteration in a loop

Example :

```
void main(void)
{
        int i ;
        for (i=1; i<=5; i + +)
        {
            if (i % 2 = = 0)
                continue ;
            printf("%d",i);

        }
}
```

135