CODING: LEC-2

Comments:

```
#include<stdio.h>

//this is a single line comment

Int main(){

/*this is

A comment*/

printf(“hello\n”);

}
```

Else if

Example 3: C if...else Ladder

```c
// Program to relate two integers using =, > or < symbol

#include <stdio.h>
int main()
{
      int number1, number2;
      printf("Enter two integers: ");
      scanf("%d %d", &number1, &number2);

      //checks if the two integers are equal.
      if(number1 == number2)
      {
            printf("Result: %d = %d",number1,number2);
      }

      //checks if number1 is greater than number2.
      else if (number1 > number2)
      {
            printf("Result: %d > %d", number1, number2);
      }

      //checks if both test expressions are false
      else
      {
            printf("Result: %d < %d",number1, number2);
      }

      return 0;
}
```

Switch case

```c
#include <stdio.h>

int main () {

   /* local variable definition */
   char grade = 'B';

   switch(grade) {
      case 'A' :
         printf("Excellent!\n" );
         break;
      case 'B' :
      case 'C' :
         printf("Well done\n" );
         break;
      case 'D' :
         printf("You passed\n" );
         break;
      case 'F' :
         printf("Better try again\n" );
         break;
      default :
         printf("Invalid grade\n" );
   }

   printf("Your grade is  %c\n", grade );

   return 0;
}
```

Q.Make a calculator using decision making structures(if else,switch case) which first takes input of the operation to be done ,i.e +,-./,%,* and then two numbers on which the operation is to be performed and then prints the result.

While loop

Syntax:

```
while(condition) {
statement(s);
}
```

```
#include <stdio.h>
 int main () {

   int a = 10;

   while( a < 20 ) {
      printf("value of a: %d\n", a);
      a++;
   }

   return 0;
}
```

OUTPUT:

```
value of a: 10
value of a: 11
value of a: 12
value of a: 13
value of a: 14
value of a: 15
value of a: 16
value of a: 17
value of a: 18
value of a: 19
```

For Loop

Syntax:

```
for ( init; condition; increment ) {
 statement(s);
 }
```

```
#include <stdio.h>
 int main () {

   int a;

   /* for loop execution */
   for( a = 10; a < 20; a = a + 1 ){
      printf("value of a: %d\n", a);
   }

   return 0;
}
```

Break and continue

Syntax:break;

Syntax: continue;

Q.Write a program that takes a number as its input and tells whether the number is prime number or not (use for or while loop).