ASSIGNMENT 2

DATE:21-11-2025

1)Prepare 20 MCQ'S on increment and decrement on conditional statements.

1. What will be the output of the following code?

int a = 5;

printf("%d", ++a);

A) 4
B) 5
C) 6
D) 7

Answer: C

---

2. What is the output?

int a = 5;

printf("%d", a++);

A) 5
B) 6
C) Error
D) Garbage

Answer: A

---

3. What is the final value of a?

int a = 10;

a++;

++a;

A) 10
B) 11
C) 12
D) 13

Answer: C

---

4. Output?

int a = 5, b = 6;

printf("%d", a++ + ++b);

A) 11
B) 12
C) 13
D) 14

Answer: C
(5 + 7)

---

5. Output?

int x = 3;

if(++x == 4)

   printf("Yes");

else

   printf("No");

A) Yes
B) No
C) Compilation error
D) Runtime error

Answer: A

---

6. Output?

```
int x = 3;
if(x++ == 4)
    printf("True");
else
    printf("False");
```

A) True
B) False
C) Compilation error
D) None

Answer: B

---

7. What is the output?

```
int a = 5;
if(--a == 4)
    printf("OK");
```

A) OK
B) No output
C) Error
D) None

Answer: A

---

8. Final value of x?

```
int x = 2;
if(x-- > 2)
    x++;
```

A) 1
B) 2
C) 3
D) 0

Answer: A

---

9. Output?

```
int a = 4;
if(a++ == 4)
    printf("%d", a);
```

A) 3
B) 4
C) 5
D) No output

Answer: C

---

10. Output?

```
int a = 5, b = 5;
if(a++ == ++b)
    printf("Equal");
else
    printf("Not Equal");
```

A) Equal
B) Not Equal
C) Error
D) 5

Answer: B
(a++ → 5, ++b → 6)

---

11. Output?

```
int x = 1;
if(++x && x++)
```

```
    printf("%d", x);
```

A) 1
B) 2
C) 3
D) 4

Answer: C

---

12. Output?

```
int x = 0;

if(x++ || ++x)

    printf("%d", x);
```

A) 0
B) 1
C) 2
D) 3

Answer: C

(x++ is 0 → false, so ++x executes → x becomes 2)

---

13. Output?

```
int x = 5;

printf("%d", x++ + x++);
```

A) 10
B) 11
C) 12
D) Undefined

Answer: D

(Sequence point violation)

---

14. Output?

```c
int a = 1;
if(a-- > 0)
    printf("%d", a);
```

A) 1
B) 0
C) -1
D) No output

Answer: B

---

15. Output?

```c
int a = 10;
if(a++ > 10)
    printf("A");
else
    printf("B");
```

A) A
B) B
C) 10
D) 11

Answer: B

16. Output?

```c
int a = 3;
int b = 4;
if(++a == b--)
    printf("%d %d", a, b);
```

A) 3 4
B) 4 4
C) 4 3
D) No output

Answer: C

---

17. Output?

```
int a = 6;
if(--a == 5 && a++ == 5)
    printf("Yes");
else
    printf("No");
```

A) Yes
B) No
C) Error
D) None

Answer: A

---

18. Output?

```
int x = 7;
if(x++ == 8 || --x == 7)
    printf("OK");
```

A) OK
B) No output
C) Error
D) 8

Answer: A

---

19. Output?

```
int a = 5;
if(a++ && ++a)
    printf("%d", a);
```

A) 5
B) 6
C) 7
D) 8

Answer: C

---

20. Output?

int a = 0;

if(++a && a--)

   printf("%d", a);

A) 0
B) 1
C) -1
D) No output

Answer: A

2)Program to find maximum between three numbers using nested if.

#include<stdio.h>

int main()

{

   int a,b,c;

   printf("Enter the three numbers:");

   scanf("%d %d %d",&a,&b,&c);

   if(a>c && b>c)

   {

```c
    if(a>b)
    {
        printf("a=%d is greater",a);
    }
    else
    {
        printf("b=%d is greater",b);
    }
}
else
{
    printf("c=%d is greater",c);
}
return 0;
}
```