

1. Pre increment / decrement
2. substitution.
3. Post increment / Decrement.
4. evaluation.
5. Assignment

$=x=x=$

1. Prepare 20 MCOS Increment Decrement Operations.
2. program to find maximum between three numbers using Nested If.

Q1

$=x=x=$

1. what is the value of x after the following?

```
int x=5;
x++;
```

Ans:- 6

2. what does ' $++x$ ' represent?

A) Pre-increment.

3) what is the output?

```
int x=3;
printf("%d", x++);
```

A) 3.

ii) value of x after code executes?

```
int x=10;
int y = ++x;
```

A) 11

5) what is printed?

int x=10;

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

A) 9

B) what is the result?

int x=5;

int x=x-- + 2;

A) (x returns 5, $5+2=7$).

B) final value of x?

A) int x=0;

x = x++ + ++x;

C) undefined behaviour

D) which operator has higher precedence?

A) they have same precedence(++, -)

B) what is the output?

int x=1;

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

A) undefined.

B) pre-decrement does what?

A) decreases then uses the value.

B) what is the output?

int x=7;

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

A) 7,

12) value of x after code?

```
int x=2;  
x = --x;
```

A) 7

13) output?

```
int x=6;  
int y = ++x + --x;  
printf("%d", y);
```

A) 11

14) which is true about post increment.

A) value is used first then incremented.

15) output

```
int x=5;  
printf("%d", ++x * 2);
```

A) 12

16) what is the result?

```
int x=10;  
int y = x++ + x--;
```

A) undefined.

17) valid operator?

A) ++x

18) ~~int x=0;~~; what is the output?

```
int x=0;  
printf("%d", x--- - -x);
```

A) undefined.

19) what is the final value of x?

```
int x=3;
```

x+ = x++;

A) undefined behaviour.

②

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

```
{
```

```
    int a, b, c;
```

```
    printf("enter three numbers: ");
    scanf("%d %d %d", &a, &b, &c);
```

```
    if (a > b)
```

```
    {
```

```
        if (a > c)
```

```
{
```

```
            printf("%d is the maximum.\n", a);
```

```
}
```

```
else
```

```
{
```

```
    printf("%d is the maximum.\n", c);
```

```
}
```

```
if (b > c)
```

```
{
```

```
    printf("%d is the maximum.\n", b);
```

```
}
```

```
else
```

```
{
```

```
    printf("%d is the maximum.\n", c);
```

```
}
```

```
y
```

```
y
```

```
return 0;
```

→ no of positive and negative iter.

```
#include<stdio.h>
```

```
int n;
```

```
scanf("%d", &n);
```

```
if(n<0){
```

```
    printf("-ve");
```

```
}
```

```
if(n>0){
```

```
    printf("+ve");
```

```
}
```

```
if(n==0){
```

```
    printf("zero");
```

```
}
```

```
return 0;
```

```
.
```

→ program to check number is positive, negative, zero in if--else statement..

```
#include<stdio.h>
```

```
int n;
```

```
scanf("%d", &n);
```

```
if(n<0){
```

```
}
```

```
    printf("Lve");
```

```
.
```

```
else if(n>0){
```

```
    printf("+ve");
```

```
.
```

```
else (n==0){
```

```
    printf("zero");
```

```
.
```

```

    #include <stdio.h>
    int main()
    {
        int n;
        scanf("%d", &n);
        if (n % 2 == 0)
            printf("even");
        else
            printf("odd");
    }

```

Q.

* 20 marks on loop concept.

Q) Which of the following is an entry controlled loop?

A) while loop.

2) which loop is guaranteed to execute at least once?

A) do-while loop.

3) How many times will the following loop run?
 for (i=0; i<5; i++)

A) 5

Q) What is the output of:

```

for i in range(3):
    print(i)

```

A) 012.

B) which statement is used to skip the current iteration?

A) continue.

6) which statement is used to terminate a loop?
A) break
B) a loop inside another loop is known as?

C) nested loop.
D) which loop best suited when the number of iterations is known in advance?

E) for.
F) what is the output?

$i = 1$
`while(i <= 3);
printf(i);
 $i += 1$`

G) 123

H) which of the following returns an infinite loop?
A) `while(i > 0)`

I) what is the loop control variable?

J) A variable that changes value during loop execution.

K) what will be the output?

`for i in range(1, 6, 2);
print(i)`

L) 135

M) which loop is preferred when checking a condition at the start?
A) while

14) which is true about the for loop?

A) all are optional

B) what does break do to a nested loop?

C) exits only the inner loop.

D) which of the following creates an infinite loop in Python?

A) while True:

B) what is the output?

```
for i in range(3):
```

```
    for j in range(2):
```

```
        print("Hi")
```

A) Hi printed 6 times

B) what happens if the loop condition is always false at the start?

A) loop does not run.

B) which keyword immediately moves control to the next iteration?

A) continue.

B) which of the following is not a type of loop?

A) switch.

$=x =x =$