1) Read two integer values perform bitwise operations.
Eg:- AND, NOT, OR, XOR.

```
#include <stdio.h>
int main()
{
 int a=12, b=25;
 Printf("output = %d", a&b);
 Printf("output = %d", a|b);
 Printf("output = %d", a^b);
 return 0;
}
```

Output

a&b = 8

a|b = 29

a^b = 21

XOR

```
#include <stdio.h>
int main()
{
Printf("output = %d\n", ~4);
 Printf("output = %d\n", ~2);
 return 0;
}
```

Output = -5

output = -3

greater than.

```
#include<stdio.h>
int main()
{
int a=10, b=5.,
if (a>b)
{
Printf("a is greater than b \n").,
}
else {
Printf ("a is not greater than b\n").,
}
return 0.,
}
```

output

a is greater than b.

2) Less than.

```
#include <stdio.h>
int main()
{
int a=5, b=10
if(a<b)
{
 Printf ("a is less than b \n").,
}
 else {
Printf("a is not less than b \n").,
}
return 0.,
}
```

Output : a is less than b

3) greater than or equal to

```
#include <stdio.h>
int main()
{
int a=5, b=5.,
if (a>=b)
{
Printf ("a is greater than or equal to b \n").,
}
else{
Printf("a is not greater than or equal to b \n").,
}
return 0.,
}
```

Output

a is greater than or equal to b.

4) less than or equal to.

```
#include <stdio.h>
int main()
{
int a=5, b=10.,
if (a<=b)
{
Printf('a is less than or equal to b \n').,
}
else{
Printf ("a is not less than or equal to b \n").,
}
return 0.,
}
```

Output

a is less than or equal to b.

5) is equal to.

```
#include <stdio.h>
int main()
{
int a=10, b=10;
if(a==b)
{
Printf("a is equal to b \n");
}
else{
Printf("a is not equal to b \n");
}
return 0;
}
```

Output

a is equal to b.

6) NOT equal to.

```
#include <stdio.h>
int main()
{
int a=10, b=5;
if(a!=b)
{
Printf("a is not equal to b \n");
}
else{
Printf("a is equal to b \n");
}
return 0;
}
```

Output

a is not equal to b

MCQ's

1) What is the output of the following C code snippet?

```
int a = 5;
int b = ++a;
Printf("a = %d, b = %d\n", a, b);
```

a) a=5, b=5

b) a=6, b=5

c) a=6, b=6

d) a=5, b=6

Answer: c) a=6, b=6.

2) What is the output of the following C code snippet?

```
int x = 10;
int y = x--;
Printf("x = %d, y = %d\n", x, y);
```

a) x=10, y=10

b) x=9, y=10

c) x=9, y=9

d) x=10, y=9

Answer: b) x=9, y=10.

3) Consider the following C code:

```
int i = 3;
Printf("%d %d %d\n", i++, ++i, i);
```

What will be the output?

a) 3 5 5

b) 4 5 5

c) 3 4 5

d) The behavior is undefined due to multiple modifications of i with a single printf statement.

Answer: d.

4) what will be the output of the following c code snippet?

```
int x=5;
Printf("%d", x++);
```

a) 5
b) 6
c) 4
d) compile error.

Answer: a) 5

5) what will be the output of the following c code snippet?

```
int x=5;
Printf("%d", ++x);
```

a) 5
b) 6
c) 4
d) compile error.

Answer: b) 6.

6) what will be the values of a and b after the following code executes?

```
int a=10, b;
b=--a;
```

a) a=10, b=10
b) a=9, b=10
c) a=9, b=9
d) a=10, b=9

Answer: c) a=9, b=9.

7) what will be the output of the following code?

```
int i=0;
int x=i++, y=++i;
Printf("%d %d", x, y);
```

a) 0 2 b) 0 1 c) 1 2 d) undefined behavior

Answer: a) 0 2

Here is a multiple-choice question on shift operator in C:

8) what will be the output of the following c code snippet?

```
#include <stdio.h>
int main()
{
int x = 12;
int y = x << 2;
Printf ("%d \n", y);
return 0;
}
```

a) 3 b) 6 c) 24 d) 48

Answer: d) 48.

9)
```
#include <stdio.h>
int main()
{
int x = 5;
int result = x << 2;
Printf("%d", result);
result 0;
}
```

a) 5 b) 10 c) 20 d) 2

Answer: c) 20

10) What is the result of the expression 12/5?

a) 2 b) 2.4 c) 2.5 d) 2.0

Answer: d) 2.0

11) What is the output of the expression 5%3?

a) 1 b) 2 c) 3 d) 0.333.

Answer: b) 2

12) what is the result of the expression (2+3)*4.8?

a) 20 b) 14 c) 25 d) 24

Answer: d) 24.

13) what is the value of x after the statement x+=5., if x is initially 10?

a) 15 b) 10 c) 5 d) 50

Answer: a) 15

14) What is the result of the expression size of(int)?

a) 4 b) 2

c) 8 d) Depends on the platform.

Answer: d) Depends on the platform.

15) the expression 5>3 && 2<4 after execution gives the result?

a) True b) false

c) 1 d) 0

Answer: a) true.