

Assignments

Subject	C	Batch	ES--02
Time		Date	04-02-2026

- Outputs & observations are to be written into Assignment1_ans.txt
- Write answers in the text file exactly in the same order as questions given below.
- At the end of assignment write "**END OF ASSIGNMENT-5**"

[Control structure – Decision making]

1. Write a program to print the type(category) of user supplied char from stdin. The categories are
Numeric/Uppercase/lowercase/spl char. (Write program using if/else) and (Write program using conditional operator.)
2. Write a program to test the status of a bit in a supplied integer. (It should display the bit is 1 or 0).
3. Evaluate and find out which one is appropriate and equal to $x \% y$
 - o $y - (x/y) * x$
 - o $x - (x/y) * y$
 - o $x - (y/x) * x$
 - o $y - (y/x) * y$
4. Find the output

```
void main () {  
    int x,y; x=10;  
    y=sizeof(++x);  
    printf("x=%d y=%d", x,y); Why?  
}
```
5. What will be the value of 'x' after execution of the following program?

```
void main ()  
{  
    int x=!0*20;  
}
```

Why?

6. Find the output

```
void main( )
{
    int a=3, b=4, c;
    c=b==4 || a!=3;
    printf (&temp;%d&temp; c);
}
```

} Reason?

7. Consider a scenario where a “raise”flag is modified within any function and accessed in the other function. If that flag is ‘1’ , make result variable ‘1’ else ‘0’. If flag is ‘0’t he code should wait on testing the raise flag.

8. What is a difference between unsigned int and signed int in C? Write description.

9. Write a for loop without initialization, condition, or increment.

10.What is the output.

```
#include <stdio.h>
int main() {
    int i = 0;
    for(i = 0; i < 5; i++);
    printf("%d\n", i);
    return 0;
}
```

11.What is the output

```
#include <stdio.h>
int main() {
    unsigned char x = 250;
    for(; x >= 0; x--) {
        printf("%u ", x);
        if (x == 0) break;
    }
}
```

12.What is the output.

```
#include <stdio.h>
int main()
{
    int x = 1, y = 0, z = 3;
    x > y ? printf("%d", z) : return z;
}
```

```
    return 0;
}
```

13.What is the output

```
#include <stdio.h>
int main()
{
    int i = -3;
    int k = i % 2;
    printf("%d\n", k);
}
```

14.Write a program to swap lower nibbles. Let's say i=0x1234. Make it i=0x3412., If I = 0x12345678 then it should change to 0x34127856.

***** **END OF ASSIGNMENT-5**
