

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**
 - $y-(x/y)*x$
 - $x-(x/y)*y$
 - $x-(y/x)*x$
 - $y-(y/x)*y$
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’ the 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**
