

Assignments

Subject	c	Batch	ES--02
Time		Date	29-01-2026

- 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-3**”

[Control structure – Decision making]

1. Write program to print the following patterns . Pattern should be scalable, if input (number of lines) is 6 then the output should be.

```
A
A*B
A*B*C
A*B*C*D
A*B*C*D*E
```

2. Execute below

```
A A A A
  B B B
    C C
      D
    C C
  B B B
```

3. int main()

```
{
  int i=0;
  for(i=0; i<20; i++)
  {
    switch(i)
    {
      case 0: i+=5;
      case 1: i+=2;
      case 5: i+=5;
      default: i+=4;
```

```

        break;
    }
    printf("%d\n", i);
}
return 0;
}
4. int main() {
    int a = 0, i = 0, b;
    for (i = 0; i < 5; i++)
    {
        printf("in loop: i=%d\n");
        a++;
        if (i == 3) break;
    }
}

```

```

5.
int main()
{
    int i = 0;
    do
    {
        i++;
        if (i == 2)
            continue;
        printf("In while loop ");
    } while (i < 2);
    printf("%d\n", i);
}

```

6. Write a program to print numbers between 1 to 500 that are divisible by 7 using goto.
7. Write a program to calculate the sum and average of 10 positive numbers using continue for skipping invalid input.
8. Write a program to input a number and a digit and find whether the digit is present in the number or not, if present, then count the number of times it occurs in the number? Let say 12345 number, check repetitive digit and count it.
9. Program to Set a Specific Bit of a Number
10. Program to clear a Specific Bit of a number
11. Program to toggle Specific Bit of a number
12. Program to Check if a Specific Bit is Set or Clear(status of a bit)

13. Program to Count the Set Bits (1's) in an Integer

14. Program to Count Clear Bits (0's) in an Integer"

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