E-Con System interview preparation

Note: all the questions are taken from the internet. You need to prepare lot to crack this interview. This questions are taken from
https://www.glassdoor.co.in/Interview/e-con-Systems-Interview-Questions-E414575.htm

Puzzels & Amptitude

1) n puzzle test , a small town, there are three temples in a row and a well in front of each temple. A pilgrim came to the town with certain number of flowers.
Before entering the first temple, he washed all the flowers he had with the water of well. To his surprise, flowers doubled. He offered few flowers to the God in the first temple and moved to the second temple. Here also, before entering the temple he washed the remaining flowers with the water of well. And again his flowers doubled. He offered few flowers to the God in second temple and moved to the third temple. Here also, his flowers doubled after washing them with water. He offered few flowers to the God in third temple.
There were no flowers left when pilgrim came out of third temple and he offered same number of flowers to the God in all three temples. What is the minimum number of flowers the pilgrim had initially? How many flower did he offer to each God?

2) I bought a car with a peculiar 5 digit numbered lisence plate which on reversing could still be read. On reversing, its value is increased by 78633. What is the original number if all digits are different?

3)In a party there are 5 couples. Out of them 5 people are chosen at random. Find the probability that there are at the least two couples?

4)If the length and width of a rectangle are 15 cm and 13 cm, then find its area.

5)I participated in a race.1/5th of those who are before me are equal to 5/6th of those behind me. What were the total number of contestants in the race?

6)In what time will Rs.4000 lent at 3% per annum on simple interest earn as much interest as Rs.5000 will earn in 5 years at 4% per annum on simple interest?

7)If 1.5x=0.04y then the value of (y-x)/(y+x) is ?

8)Find the size of the largest square slabs which can be paved on the floor of a room 5 meters 44 cm long and 3 meters 74 cm broad?

9)I have a two wheeler and I have three tyres. Each tyre can be used only for 5 km. So for how long can the two wheeler go?

10)A sends 50 robots towards B and B sends 20 robots everytime the robots meet collision occurs and for each collision the robot bounces back and goes in opposite direction.How many robots did reach A and B finally?

11)the devotee problem how many flowers were left after certain days

12) probability two problems

13)rope problems

14)u have 10 red socks and 10 blue in ur cupboard .you have to take 1 pair of socks but ur room is completely dark.how many minimum no. of socks required to take so that u ll be sure to get atleast a pair of same coloured socks?

15)three owners X, Y, z owned some tractors with them, on the first month x gave away the same amount of tractors to y and z (as much as they possed), similarly in the 2nd month y gave of to x and z similarly by third month z gave to x and y. after this all X, Y, Z had 24 tractors each.

C Programming(subjective and objective)

1) How to add 2 100 digit numbers in c

2) Multiplication of two 50 digit numbers?

3) finding length of a string without using library function,
find the number of one's and zero's in a given number using bitwise operator,

4)Pointers, memory management, strings and data structures

5)What is the difference between 32bit and 64 bit os?

6)implement Radix sort in c

7)Array Manipulations and other basic programming using C?

8)What is a Function pointer write its syntax.

9)Programs include :
(i) counting no. of vowels, consonants, digits and spaces and string concatenation without
using string functions.
(ii) stack and queue (all operations), Radix sort
(iii) remove duplicates from an array
if you give all right answers they will even ask you to write a code for multiplication of two 250 digit numbers.

10) How to print 1 to 100 without using semicolon?

11)how do generate infinite loop with for loop?

12)usage of structures,difference b/w structures and unions,structure within union,union with in structure.....The most important thing is they expect a clear understanding of the "Pointers"..

13)polymorphism related questions
file related questions
string related programs
Inheritance related questions
linux systems programming
structure related concepts
virtual systems related questions

thread related questions
mutex related questions
semaphore related questions

Extar: https://www.javatpoint.com/c-interview-questions

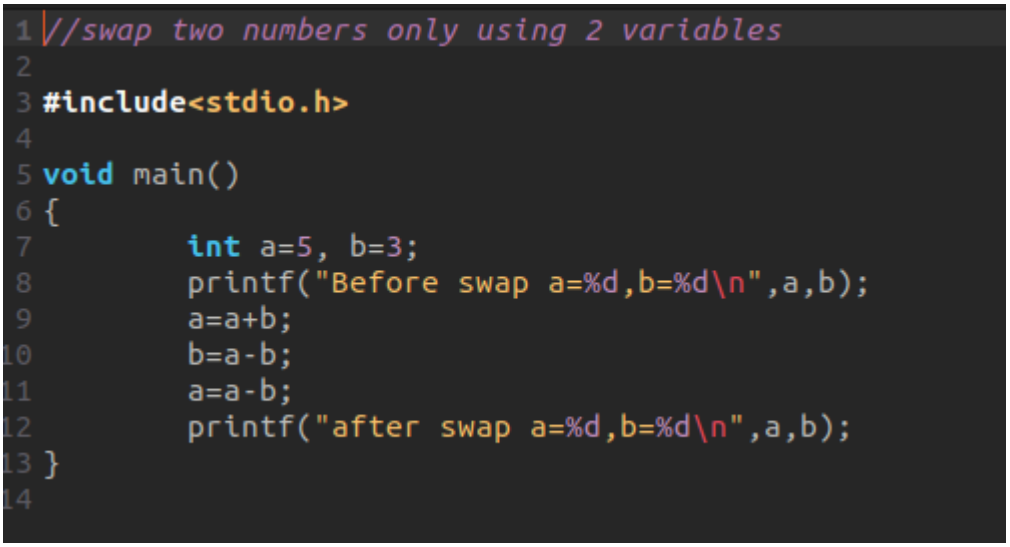
C programming

1) Write a program to print helloworld without using semicolon

```c
#include<stdio.h>

int main(){
if(printf("hello world")){
}
return 0;
}
```

2) Swap a two number using only 2 variables



```c
//swap two numbers only using 2 variables

#include<stdio.h>

void main()
{
        int a=5, b=3;
        printf("Before swap a=%d,b=%d\n",a,b);
        a=a+b;
        b=a-b;
        a=a-b;
        printf("after swap a=%d,b=%d\n",a,b);
}

```

```
 ./a.out
Before swap a=5,b=3
after swap a=3,b=5
```

3)fibinacci series

```c
#include<stdio.h>
void main(){
 int n1=0, n2=1, n3,n;
 n=4;// this is the number series to print on the output
 printf("%d, %d, ",n1,n2);
 for (int i=0; i<n-2; i++)
 {
        n3=n1+n2;
        printf("%d, ",n3);
        n1=n2;
        n2=n3;
 }
 }
```

Output:

```
0, 1, 1, 2,
```

3)fibonacci series with recursion

```c
//fibanocci series

#include<stdio.h>

int fibo(int n)
{
static int n1=0, n2=1, n3;
if (n!=0){
n3=n1+n2;
n1=n2;
n2=n3;
printf("%d, ",n3);
fibo(n-1);
}
}

int main(){
printf("%d, %d, ",0,1);
int N=15;//number of fibanoci series
fibo(N-2);
return 0;
}
```

output:

```
0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377,
```

4)prime number

```c
//prime number

#include<stdio.h>

void main(){
        int flag=0;
        int N=23;
        for(int i=2;i<N/2;i++){
                if(N%i==0){
                 printf("not a prime number");
                 flag=1;
                 break;
                 }
                 }
        if(flag==0)
                printf("prime number");
        }
```

Output:

```
prime number
```