1st round:

* Explain memory management in C?
* Reverse a string a[]=”welcome” with out using another array using 3rd variable and store reversed string in same array?
* Swapping techniques with out using 3rd variable? Ans: 3 types 1) using + 2)using ^ 3) using \*
* Reverse a single linked list?
* Point to the center node of a linked list with minimum no. of iterations? Ans: clue consider two athlets (a1,b1) a1 running with speeds of 50 km/hr ,b1 -100 km/hr what abt status of a1 when b1 reaches a goal of 100kms....... \*p,\*q so p->next q->next->next when

q->next->next reaches null p->next is at center of linked list......

* What is a static variable? Functionality????
* What is volatile?
* What is enum?
* What are user defined data types?
* Bit set & bit clearing using macros?
* Implement string length function?
* Wha is memset?
* What is memcpy?
* Difference between memcpy & strcpy ? why both??

2nd round:

* Swap a nibble in a byte? P=0xab; output should be 0xba;
* Perform string reverse using recursion?
* Write a C program to verify whether a machine is alittle endian or big endian?
* Convert a little endian value ex: int x=0x12345678 to a big endian int y=0x78563412? With out using shift operators?

3rd round:

* print a linked list in reverse order with out using iterations??
* If there is a code of 2000 lines and there is some memory which is dynamically allocated and not freed so there occurs memory leakage ? how can you find out memory leakage in your program?
* Write a function which returns the angle between minutes handle and hours handle in an analog clock?

4th round :

* Implement sizeof operator? If we pass sizeof(int) it should return sizeof integer for that compiler ? using macro write a c program?
* Brief questions on projects?
* Swapping techniques?
* Size of char, int , float pointers?
* If we increment a char pointer by how many address locations it gets incremented,similarly for int and float?
* Declare a function swap(int ,int )? Will it work if we pass two values as swap(2,5)?

Int main()

{

Int a=2,b=5;

Swap(a,b)

}

Int swap(int a,int b)

{

a=a+b;

b=a-b;

a=a-b;

}

🡪where does a const int x=9; stored in memory if no ROM is present to my controller?

🡪if my heap is fully allocated? If we try to allocate more memory even using malloc what is the type of error we get ?

Embedded:

🡪How can we determine the size of adress bus in a controller ??

🡪some questions on IPC?

* Mmap?
* What are locking mechanisms?
* Spin lock,mutex?differences b/w them?
* Dead lock?