1. What is the range of signed char?

Ans: -128 to 127

1. What is static local variable and static global variable? What is the difference between them?

Ans: static variables are created only once when there code is executed.

Visibility of static local variable is with in the function, but its exist through out the process.

Static global variables visibility through out the file where it is declared. It is not accessed in other files. Its life is through out the process.

1. What is the difference between macro and a constant variable?

Ans: Const variable is read only memory, constant variables are allocated memory in code area.

We cant change the value within the constant variable.

Macro is a name given to block. Macros are replaced by there macro values during preprocessing stage.

1. Const a;

What it means?

Ans: By default data type is int. So ‘a’ variable will occupy 4 bytes.

1. Write a macro which will find square of a number?

Ans: #define square(x) (x)\*(x)

square(6+6) => (6+6)\*(6+6)

1. Write a macro such that it should toggle 5th bit of a number given by user.

Ans: #define toggle(x) (x) ^ (0x20)

Eg: toggle(6) (6)^(0x20)

1. In LPC2148 what LPC stands for?
2. Why we call rtos as real time. How can u say it is a real time?
3. How can u say that a processor is a 32 bit processor?
4. Why SPI data speed is high than i2c?

Ans: In spi there will no start, stop condition and slave is selected with respect to ss pin bt not with address.

1. What is EEPROM?
2. Is EEPROM volatile or non volatile?
3. Can we use EEPROM instead to ROM?
4. What is volatile in c?
5. What is keypad debounce? How u overcome it in your project?
6. Void main()

{

Char a[]=”NARESH”;

Printf(“ %c”,&a+1);

Printf(“ %c”,\*a+1);

}

<= a

|  |
| --- |
| 1000 |

2000

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| N | A | R | E | S | H | \0 |

1000 1001 1002 1003 1004 1005 1006

Array name always stores the address of starting variable. Here it is storing address of ‘N’ variable. Here a is nothing but a pointer which is storing address. Pointer is also a variable, pointer variable will also have addres. So &a means 2000,

&a+1 =2000+1 =2001

‘N’ + 1 = ‘O’=> It will add 1 to ascii value of N, So it will print next character.

1. What is dynamic and static memory location? Where u have used it?
2. In a micro controller when an interrupt is occurred what happens?
3. What is maskable and non maskable interrupts?
4. What is an ALU?
5. Explain about ur project?
6. What’s ur role? What u has developed? Explain in detail what logic u has applied?
7. Write a function such that it takes an integer variable ‘x’ which having the following values

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | D |

Swap the values ‘B’ to ‘A’ and ‘C’ to ‘D’ by using pointers, don’t use bitwise operators.

Outut should be in this format:

|  |  |  |  |
| --- | --- | --- | --- |
| B | A | D | C |

1. Write a program such that in a given integer value, I wil give starting bit number and end bit number within the range of int variable. You need to reset the bits between starting and end bit numbers?