Tutorial 1:

Find the Size of the below listed C data types using Size () function.

List of Data types in C
int or signed int
unsigned int
short int or signed short int
unsigned short int
long int or signed long int
unsigned long int
Float
double
long double
char or signed char
unsigned char

Code:

```c
// Question 1 : Find the Size of the below listed C data types
// using Size () function.

#include <stdio.h>

int main()
{
    // typespecifier is %ld since it can have at max 12 bytes (long double)

    //int or signed int = 4 bytes
    int typeint;
    printf("Size of int or signed int              : %ld bytes\n", sizeof(typeint));

    //unsigned int = 4 bytes
    unsigned int typeunsignedint;
    printf("Size of unsigned int                   : %ld bytes\n", sizeof(typeunsignedint));

    //short int or signed short int = 2 bytes
    short int typeshortint;
    printf("Size of short int or signed short int : %ld bytes\n", sizeof(typeshortint));

    //unsigned short int = 2 bytes
    unsigned short int typeunsignedshortint;
    printf("Size of unsigned short int             : %ld bytes\n", sizeof(typeunsignedshortint
));

    //long int or signed long int = 4 bytes
    long int typelongint;
    printf("Size of long int or signed long int   : %ld bytes\n", sizeof(typelongint));
```

```c
    //unsigned Long int = 4 bytes
    unsigned long int typeunsignedlongint;
    printf("Size of unsigned long int                 : %ld bytes\n", sizeof(typeunsignedlongint)
);

    //Float = 4 bytes
    float typefloat;
    printf("Size of Float                             : %ld bytes\n", sizeof(typefloat));

    //double = 8 bytes
    double typedouble;
    printf("Size of double                            : %ld bytes\n", sizeof(typedouble));

    //Long double = 12 bytes
    long double typelongdouble;
    printf("Size of long double                       : %ld bytes\n", sizeof(typelongdouble));

    //char or signed char = 1 byte
    char typechar;
    printf("Size of char or signed char               : %ld byte\n", sizeof(typechar));

    //unsigned char = 1 bytes
    unsigned char typeunsignedchar;
    printf("Size of unsigned char                     : %ld byte\n", sizeof(typeunsignedchar));

    return 0;
}
```

Output:

```
Size of int or signed int               : 4 bytes
Size of unsigned int                    : 4 bytes
Size of short int or signed short int : 2 bytes
Size of unsigned short int              : 2 bytes
Size of long int or signed long int   : 4 bytes
Size of unsigned long int               : 4 bytes
Size of Float                           : 4 bytes
Size of double                          : 8 bytes
Size of long double                     : 12 bytes
Size of char or signed char             : 1 byte
Size of unsigned char                   : 1 byte
```

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