Kalinga Institute of Industrial Technology

CN LAB-1

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1. Swap two numbers using pointers

```c
#include<stdio.h>
#include<stdlib.h>
int main()
{
int a_534,b_534;
scanf("%d%d",&a_534,&b_534);
printf("\nBefore swapping the values are ");
printf("%d %d\n",a_534,b_534);
int *p_534,*q_534;
p_534=&a_534;
q_534=&b_534;
int *temp;
temp=p_534;
p_534=q_534;
q_534=temp;
printf("\nAfter swapping the values are %d %d",*p_534,*q_534);
return 0;
}
```

OUTPUT:

```
kiit@kiit-VirtualBox:~/1906534/CN/lab1$ gcc Q1.c -o swapping
kiit@kiit-VirtualBox:~/1906534/CN/lab1$ ./swapping
Enter two numbers :4 5

Before swapping the values are 4 5

After swapping the values are 5 4
```

2. Display student info using structure

```c
#include<stdlib.h>
#include<stdio.h>
struct info
{
int roll_534;
char name_534[50];
float cgpa_534;
};
void display(struct info *a_534)
{
printf("roll no is %d\n name is %s\n cgpa is %f\n",a_534-
>roll_534,a_534->name_534,a_534->cgpa_534);
}
int main()
{
struct info *a_534=(struct info *)malloc(sizeof(struct info));
printf("\nEnter the details\t");
scanf("%d",&(a_534->roll_534));
scanf("%s",a_534->name_534);
scanf("%f",&(a_534->cgpa_534));
display(a_534);
return 0;
}
```

OUTPUT :

```
kiit@kiit-VirtualBox:~/1906534/CN/lab1$ gcc Q2.c -o studentinfo
kiit@kiit-VirtualBox:~/1906534/CN/lab1$ ./studentinfo

Enter Roll Number      534

Enter Name      ankit

Enter CGPA      9.34
roll no is 534
 name is ankit
 cgpa is 9.340000
```

3. Print the endianess of a number

```c
#include<stdio.h>
#include<stdlib.h>void extract(int x_534)
{
int a_534,b_534,c_534,d_534;
a_534=x_534&0xff;
b_534=(x_534>>8)&0xff;
c_534=(x_534>>16)&0xff;
d_534=(x_534>>24)&0xff;
printf("%d %d %d %d",a_534,b_534,c_534,d_534);
}
int main()
{
int x_534;
scanf("%d",&x_534);
extract(x_534);
return 0;
}
```

OUTPUT :

```
kiit@kiit-VirtualBox:~/1906534/CN/lab1$ gcc Q3.c -o endianess
kiit@kiit-VirtualBox:~/1906534/CN/lab1$ ./endianess
4
4 0 0 0kiit@kiit-VirtualBox:~/1906534/CN/lab1$
```

4. Check whether your system is little endian or big endian

```c
#include<stdio.h>
#include<stdlib.h>
void extract(int x_534)
{
int d_534;
if(d_534==x_534)
printf("\nBig endian\t");
else
printf("\nLittle endian\t");
}
int main()
{int x_534;
scanf("%d",&x_534);
extract(x_534);
return 0;
}
```

OUTPUT:

```
kiit@kiit-VirtualBox:~/1906534/CN/lab1$ gcc Q4.c -o endian
kiit@kiit-VirtualBox:~/1906534/CN/lab1$ ./endian
7

Little endian   kiit@kiit-VirtualBox:~/1906534/CN/lab1$
```