# ASSIGNMENT 2

Q1. Write a program to display the decimal,octal and hexadecimal values of 3 numbers inputted by the user.

```c
1 #include <stdio.h>
2 int main()
3 {int a,b,c;
4 printf("enter a decimal number=");
5 scanf("%i",&a);
6 printf("the decimal value of a is %d\n",a);
7 printf("the octal value of a is %o\n",a);
8 printf("the hexadecimal value of a is %x\n\n",a);
9
10
11 printf("enter a number=");
12 scanf("%i",&b);
13 printf("the decimal value of b is %d\n",b);
14 printf("the octal value of b is %o\n",b);
15 printf("the hexadecimal value of b is %x\n\n",b);
16
17
18 printf("enter a number=");
19 scanf("%i",&c);
20 printf("the decimal value of c is %d\n",c);
21 printf("the octal value of c is %o\n",c);
22 printf("the hexadecimal value of c is %x\n\n",c);
23 }
```

```
kiit@kiit-VirtualBox:~$ gedit program7.c
kiit@kiit-VirtualBox:~$ gcc program7.c
kiit@kiit-VirtualBox:~$ ./a.out
enter a decimal number=22
the decimal value of a is 22
the octal value of a is 26
the hexadecimal value of a is 16

enter a number=13
the decimal value of b is 13
the octal value of b is 15
the hexadecimal value of b is d

enter a number=54
the decimal value of c is 54
the octal value of c is 66
the hexadecimal value of c is 36
```

Q2. Write a program to change the data type of a number

```c
1 #include<stdio.h>
2 int main()
3 {
4 int a;
5 printf("enter an integer=");
6 scanf("%d",&a);
7 printf("%d\n",a);
8 }
```

```
kiit@kiit-VirtualBox:~$ gcc program8.c
kiit@kiit-VirtualBox:~$ ./a.out
enter an integer=1
1
```

Q3. Write a program to individually display the digits of a four digit number.Also print it in reverse format.

```c
1 #include<stdio.h>
2 int main()
3 {
4 int a1,a2,a3,a4,b1,b2,b3,b4;
5 printf("enter a number=");
6 scanf("%d",&a1);
7 b1=a1%10;
8 a2=a1/10;
9 b2=a2%10;
10 a3=a2/10;
11 b3=a3%10;
12 a4=a3/10;
13 b4=a4%10;
14 printf("%d,%d,%d,%d\n",b1,b2,b3,b4);
15 printf("%d,%d,%d,%d\n",b4,b3,b2,b1);
16 }
```

```
kiit@kiit-VirtualBox:~$ gedit program9.c
kiit@kiit-VirtualBox:~$ gcc program9.c
kiit@kiit-VirtualBox:~$ ./a.out
enter a number=1234
4,3,2,1
1,2,3,4
```

Q4. Write a program to input a five digit number from the user.Print the third digit of the inputted number.

```c
1 #include<stdio.h>
2 int main()
3 {
4 int a,a1,r,i,p,r2,i2,r3,i3;
5 printf("enter a five digit number=");
6 scanf("%d",&a);
7 a1=a/100;
8 r=a1%10;
9 printf("%d",r);
10 printf("\n");
11
12
13 printf("enter a six digit number=");
14 scanf("%d",&i);
15 i2=i/1000;
16 r2=i2%10;
17 i3=i/100;
18 r3=i3%10;
19 p=r2*10+r3;
20 printf("%d",p);
21 printf("\n");
22 }
```

```
kiit@kiit-VirtualBox:~$ gcc program10.c
kiit@kiit-VirtualBox:~$ ./a.out
enter a five digit number=12345
3
enter a six digit number=123456
34
```

s

Q5. Write a program to input a three digit number from the user.Print the reverse of the inputted number.

```c
1 #include<stdio.h>
2 int main()
3 {
4 int n,s=0,r;
5 printf("enter a 3 digit number=");
6 scanf("%d",&n);
7 r=n%10;
8 s=s*10+r;
9 n=n/10;
10 r=n%10;
11 s=s*10+r;
12 n=n/10;
13 r=n%10;
14 s=s*10+r;
15 printf("%d\n",s);
16 }
```

```
kiit@kiit-VirtualBox:~$ gcc program11.c
kiit@kiit-VirtualBox:~$ ./a.out
enter a 3 digit number=123
321
kiit@kiit-VirtualBox:~$
```