**Practical 1**

**Write a C program to perform the following conversions:**

1. **Decimal to Binary Conversion**
2. **Decimal to Hexadecimal Conversion**
3. **Binary to Decimal Conversion**
4. **Decimal to Binary Conversion:**

#include<stdio.h>

void main()

{

int decimal\_number,binary\_number[10],i=0,j;

printf("Enter the decimal number: ");

scanf("%d",&decimal\_number);

while(decimal\_number>0)

{

binary\_number[i]=decimal\_number%2;

decimal\_number=decimal\_number/2;

i++;

}

printf("Binary number: ");

for(j=i-1;j>=0;j--)

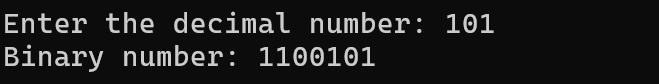
{

printf("%d",binary\_number[j]);

}

}

**Output:**

****

1. **Decimal to Hexadecimal Conversion:**

#include<stdio.h>

void main()

{

int decimal\_number,i=0,j,temp;

char hexa\_number[30];

printf("Enter the decimal number: ");

scanf("%d",&decimal\_number);

while(decimal\_number!=0)

{

temp=decimal\_number%16;

if(temp<10)

{

hexa\_number[i++]=temp+48;

}

else

{

hexa\_number[i++]=temp+55;

}

decimal\_number=decimal\_number/16;

}

printf("Hexa decimal number: ");

for(j=i-1;j>=0;j--)

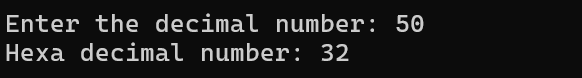
{

printf("%c",hexa\_number[j]);

}

}

**Output:**

****

1. **Binary to Decimal Conversion:**

#include<stdio.h>

void main()

{

int decimal\_number=0,binary\_number,reminder,base=1;

printf("Enter the binary number: ");

scanf("%d",&binary\_number);

while(binary\_number>0)

{

reminder=binary\_number%10;

decimal\_number=decimal\_number+reminder\*base;

binary\_number=binary\_number/10;

base=base\*2;

}

printf("Decimal number: %d",decimal\_number);

}

**Output:**

