PP ASSIGNMENT

```
#include<iostream>
#include<math.h>
#include<string.h>
using namespace std;
class Conversion
{
private:
int decimal,binary,octal,hexadecimal,i,n,r,len,a[20],j;
char num[20];
public:
void bd()
{
cout<<"Enter any binary number:";
cin>>binary;
decimal=0;
for(i=0;binary!=0;i++)
{
decimal=(binary%10)*(pow(2,i))+decimal;
binary=binary/10;
}
cout<<"The conversion is "<< decimal<<endl;
}
void od()
{
cout<<"Enter any octal number:";
cin>>octal;
decimal=0;
for(i=0;octal!=0;i++)
{
decimal=(octal%10)*(pow(8,i))+decimal;
octal=octal/10;
}
cout<<"The conversion is "<< decimal<<endl;
}
void hd()
{
cout<<"Enter a hexadecimal number:";
cin>>num;
len=strlen(num);
hexadecimal=0;
for(i=0;num[i]!='\0';i++)
{
len--;
if(num[i]>='0' && num[i]<='9')
 r=num[i]-48;
else if(num[i]>='a' && num[i]<='f')
 r=num[i]-87;
else if(num[i]>='A'&& num[i]<='F')
```

```
 r=num[i]-55;
 hexadecimal=hexadecimal+r*pow(16,len);
}
cout<<"The conversion is "<<hexadecimal<<endl;
}
void db()
{
cout<<"Enter any decimal number:";
cin>>decimal;
for(i=0;decimal!=0;i++)
{
a[i]=decimal%2;
decimal=decimal/2;
}
cout<<"The conversion is";
for(i=i-1;i>=0;i--)
cout<<a[i];
cout<<endl;
}
void dot()
{
cout<<"Enter any decimal number:";
cin>>decimal;
for(i=0;decimal!=0;i++)
{
a[i]=decimal%8;
decimal=decimal/8;
}
cout<<"The conversion is";
for(i=i-1;i>=0;i--)
cout<<a[i];
cout<<endl;
}
void dh()
{
cout<<"Enter any decimal number:";
cin>>decimal;
i=1;
while(decimal!=0)
{
r=decimal%16;
if(r<10)
num[i++]=r+48;
else
num[i++]=r+55;
decimal=decimal/16;
}
cout<<"The conversion is ";
for(j=i;j>0;j--)
cout<<num[j];
cout<<endl;
```

```
}

};
int main()
{
Conversion c1;
c1.bd();
c1.od();
c1.hd();
c1.db();
c1.dot();
c1.dh();
}
```