

```

//example 2.6(a)//
clc
//clears the command window//
clear
//clears all the variables//
q =0;
b =0;
s =0;
//a=input("Enter the decimal no to be converted to its binary equivalent: ") ;
//accepting the decimal input from user//
a =25.5;
d = modulo (a ,1) ;
//separating the decimal part and the integer part//
a = floor ( a ) ;
//removing the decimal part//
while (a >0)
//taking integer part into a matrix and convert to equivalent binary//
x = modulo (a ,2) ;
b = b + (10^ q ) * x ;
a = a /2;
a = floor ( a ) ;
q = q +1;
end
for i =1:10
//For values after decimal point converting to binary//
d = d *2;
q = floor ( d ) ;
s = s + q /(10^ i ) ;
    if d >=1 then
        d =d -1;
    end
end
k=b+s;
disp('The binary equivalent of the given decimal number is =');
disp(k);
//displaying the final result//

```

Result= (11001.1)₂