Computer Organization and Architecture

Programming Assignment

Answer the following with detailed solution:

1. Write a c program to implement Booth’s algorithm. Follow the design process of first writing the algorithm, and then converting it to code. The sample code to convert decimal number to binary is given below.

**void** convertBinary(int \_decimal, int \_binary[]) {

**int** i;

**for**(i=0;\_decimal>0;i++)

{

\_binary[i]=\_decimal%2;

\_decimal=\_decimal/2;

}

printf("\nBinary of Given Number is=");

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

{

printf("%d", \_binary[i]);

}

}

int main() {

// Write C code here

int binNum[20];

convertBinary(5, binNum);

return 0;

}