

## HOMEWOR –II

1. write an assembly code that Compute a CRC Checksum (16-bit)
2. write an assembly code that multiply two 8-bit signed integers.
3. Write the assembly code for the following C code

```
If(I<J) then
{
    for(k=0;k<10;k++)
    {
        A[k] = -A[k]
    }
}
else
{
    I=I-1;
}
```

A[k] array is going to be stored into 64-bytes RAM of Picoblaze. I, J, k are going to be stroed in registers. Assume that all values are 8-bit.

4. Write the assembly code for the following C code

```
While(b >= c)
{
    b=b-c
}
```

b and c are both 16-bit signed numbers, and they are going to be stored into registers.

5. Write the assembly code for the following C code

```
do
{
    A[k+32]=A[k];
    k++;
}while(k<32)
```

A[k] array is going to be stored into 64-bytes RAM of Picoblaze. k is going to be stroed in registers. Assume that all values are 8-bit.

6. Write the assembly code for the following C code

```
int Fibonacci(int n){
    if(n==0){
        return 0;
    }
    else if(n==1){
        return 1;
    }
}
```

```

    }
    else{
        return(Fibonacci(n-1)+ Fibonacci(n-2))
    }
}

```

7. Write the assembly code for the following C code

```

While(b.5 ==1 )
{
    b=b-c
}

```

b and c are both 16-bit signed numbers, and they are going to be stored into registers.

8. Write an assembly code to find the largest number stored in RAM
9. Write an assembly code to find the smallest number stored in RAM
10. Write an assembly code that computes  $a \bmod b$ . a and b are both 8-bits.
11. write an assembly code that subtract two 16-bit signed integers.
12. write an assembly code that compare to 16-bit numbers.
13. write an assembly code that convert binary-coded decimal number into a decimal number.
14. write an assembly code that convert decimal number into a binary-coded decimal number.
15. write an assembly code that rotate 32-bit.

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