

Shameem, Shuaib
 673551999 – sshame3
 2/06/2012
 Instructor: Mr. Becker
 Homework – Week 4

1)

D6	LDAB	Direct
22	BHI	Relative
73	DEC	Extended
20	BRA	Relative
A4	ANDA	Index
18 16	SBA	Inherent
27	BEQ	Relative
F9	ADCB	Extended
3F	SWI	Inherent

2)

B7 eb	EXG	Inherent
B7 **	Transfer Instructions	Inherent
F6	LDAB	Extended
18 03	MOVW	Immediate-Extended
A2	SBCA	Index
17	JSR	Direct
21	BRN	Relative
5A	STAA	Direct
A6	LDAA	Index
2E	BGT	Relative
04 B6	IBNE	Relative
F5	BITB	Extended

3) b, c, f, g

4)

AA	N	Z	V	C
\$00	1	0	1	0
\$00	0	1	0	0
\$40	0	0	0	0
\$C8	1	0	0	0
\$90	1	0	0	1
\$21	0	0	1	1
\$F0	1	0	1	0

5)

```
ARRAY    EQU    $3900
          ORG    $3800
TEMP     DC.B   1
          ORG    $4000
          LDX    #$00
          LDY    #$001F
LOOP     LDAA   ARRAY, X
          STAA   TEMP
          LDAA   ARRAY, Y
          STAA   ARRAY, X
          LDAA   TEMP
          STAA   ARRAY, Y
          INX
          DEY
          CPX    #$0010
          BNE    LOOP
          BRA    *
```

6)

```
COUNT    EQU    $3900
ARRAY    EQU    $5000
          ORG    $4000
          LDAA   #$00
          STAA   COUNT
          LDX    #$02
          LDY    #$00
LOOP     LDD    ARRAY, Y
          IDIV
          INY
          INY
          CMPB   #$00
          BEQ    LOOP
          LDAA   COUNT
          INCA
          STAA   COUNT
          CPY    #$0066
          BNE    LOOP
          BRA    *
```

7)

```
TABLE    EQU    $C000
RESULT   EQU    $3900
          ORG    $4000
          LDX    #$0000
          LDY    #$0000
LOOP      LDAB   TABLE, X
          ABY
          INX
          CPX    #N
          BNE    LOOP
          TFR    Y, D
          IDIV
          STD    RESULT
          BRA    *
```

8)

```
PORTT    EQU    $240
DDRT      EQU    $242
          ORG    $4000
          STAA   #$F0
          LDAA   DDRT
LOOP      LDAA   PORTT
          ROLA
          ROLA
          ROLA
          ROLA
          STAA   PORTT
          BRA    LOOP
```

```

9)
PORTT    EQU    $240
DDRT     EQU    $242
PORTAN   EQU    $270
DDRAN    EQU    $272
TABLE    EQU    $5000
          ORG    $4000
          LDAA   #$FF
          STAA   DDRT
          STAA   DDRAN
          LDY    #$00
LOOP      LDD    TABLE, Y
          STAA   PORTT
          STAB   PORTAN
          JSR    DELAY
          CPY    #$14
          BNE    LOOP
          LDY    #$00
          BRA    LOOP
DELAY      PSHA
          PSHY
          LDY    #4
          MOVB   #$90,$46
          MOVB   #$06,$4D
          MOVB   #$01,$40
          LDD    $44
AGAIN     ADDD   #37500
          STD    $50
WAIT      BRCLR  $4E,$01,WAIT
          LDD    $50
          DBNE   Y,AGAIN
          PULY
          PULA
          RTS

```