Problem 1:

La $s3, 0x10011111 //Arbitrary start address of array A

addi $t0, $0, 5 //Load array values

sb $t0, 0($s3)

Addi $s3, $s3, 4

addi $t0, $0, 3

sb $t0, 0($s3)

Addi $s3, $s3, 4

addi $t0, $0, 6

sb $t0, 0($s3)

Addi $s3, $s3, 4

addi $t0, $0, 8

sb $t0, 0($s3)

Addi $s3, $s3, 4

addi $t0, $0, 9

sb $t0, 0($s3)

Addi $s3, $s3, 4

addi $t0, $0, 1

sb $t0, 0($s3)

Addi $s3, $s3, 4

addi $t0, $0, 4

sb $t0, 0($s3)

Addi $s3, $s3, 4

addi $t0, $0, 7

sb $t0, 0($s3)

Addi $s3, $s3, 4

addi $t0, $0, 2

sb $t0, 0($s3)

Addi $s3, $s3, 4

addi $t0, $0, 10

sb $t0, 0($s3)

Addi $s3, $s3, 4

La $s3, 0x10011111 //Load back to first element

addi $t0, $0, -1 //I =-1

addi $s0, $0, 9 //n-1=9

Loop1:

addi $t0, $t0, 1 /i= I + 1

Beq $t0, $s0, End

sub $s1, $s0, $t0 //n-i-1

addi $t1, $0, 0 //J=0

Loop2:

lb $t3, 0($s3) //A[j]

lb $t4, 4($s3) //A[j+1]

bge $t3, $t4, IF

addi $t1, $t1, 1 //Increment j

Beq $t1, $s1, Loop1

j Loop2

IF:

Sb $t4, 0($s3) //Switch A[j] and A[j+1]

Sb $t3, 4($s3)

addi $t1, $t1, 1

Beq $t1, $s1, Loop1

j Loop2

END

Problem 2:

La $s3, 0x10011111 //Arbitrary start address of array A

Addi $t0, $0, 3 //I =3

Addi $s0, $0, 11 //Fibonoacci of 10

Sb $t3, 0($s3) //F(1)=1

Sb $t3, 4($s3) //F(2)=1

Loop1:

Lb $t4, -8($s3) //Loads A[i-2]

Lb $t5, -4($s3) //Loads A[i-1]

Add $t6, $t4, $t5 //Adds values

Sb $t6, 0($s3)

Addi $t0, $t0, 1 //i= i+1

Beq $t0, $s0, End //If i=11, then jump to end

Addi $s3, $s3, 4 //Increment array

J Loop1

End:

Sb $t0, 0($s3) //Stores Fibonnacci number in $t0 register