6.3 - Consider the following array:

Int[] a = {1, 2, 3, 4, 5, 4, 3, 2, 1, 0};

What is the value of total after the following loops complete?

A - 25

Int total = 0;

For (int i = 0; i < 10; i++) {total = total + a[i]; }

G - 0

Int toal = 0;

For (int i = 9; i >= 0; i = i - 2; { total = a[i] - total; }

6.10 - Rewrite the following loops using the enhanced for loop construct. Here values in an array of floating point numbers

For (int i = 0; i < values.length; i++) {total = total + values[i];}

A - for(int i : values) {

total = total + values[i];

}

6.20 - Give pseudocode for an algorithm that rotates the elements of an array by one position, moving the inital element to the end of the array like this

2 3 5 7 11 13

3 5 7 11 13 2

Declare your array variable

Declare a first num variable and set equal the array at position 0 to that variable;

A for loop that loops through the array and shifts the index over one position

Declare the last position of the Array equal to first num

Another for loop to print the array

6.29 - Write Java Statements for performing the following tasks with an array declared as

Int[][] values = new int[ROWS][COLUMNS];

1 -

```
Scanner key = new Scanner(System.in);
int rows, cols, sum;

System.out.println("Enter the number of rows in the array -");
rows = key.nextInt();

System.out.println("Enter the number of columns in the array -");
cols = key.nextInt();

int[][] intArray = new int[rows][cols];

for (int i = 0; i < rows; i++) {
   for (int j = 0; j < cols; j++) {
       int num = 0;
       intArray[i][j] = num;
```

```
        }
    }


    for (int i = 0; i < rows; i++) {
        for (int j = 0; j < cols; j++) {
            System.out.print(intArray[i][j] + "\t");
        }
        System.out.println(" ");
    }
```

2 -

```
    Scanner key = new Scanner(System.in);
    int rows, cols, sum;

    System.out.println("Enter the number of rows in the array -");
    rows = key.nextInt();

    System.out.println("Enter the number of columns in the array -");
    cols = key.nextInt();

    int[][] intArray = new int[rows][cols];
    int num = 0;
    for (int i = 0; i < rows; i++) {
        for (int j = 0; j < cols; j++) {
            if (i % 2 == j % 2) {
                num = 0;
            } else {
                num = 1;
            }

            intArray[i][j] = num;
        }
    }


    for (int i = 0; i < rows; i++) {
        for (int j = 0; j < cols; j++) {
            System.out.print(intArray[i][j] + "\t");
        }
        System.out.println(" ");
    }

  }
}
```

3 -

```
    Scanner key = new Scanner(System.in);
    int rows, cols, sum;

    System.out.println("Enter the number of rows in the array -");
    rows = key.nextInt();

    System.out.println("Enter the number of columns in the array -");
    cols = key.nextInt();

    int[][] intArray = new int[rows][cols];
```

```
        int num = 0;
        for (int i = 0; i < rows; i++) {
            for (int j = 0; j < cols; j++) {
                if (i == 0 || i == rows - 1) {
                    num = 0;
                } else {
                    num = 1;
                }

                intArray[i][j] = num;
            }
        }


        for (int i = 0; i < rows; i++) {
            for (int j = 0; j < cols; j++) {
                System.out.print(intArray[i][j] + "\t");
            }
            System.out.println(" ");
        }

    }
}
```