🎯 Time Complexity Code Snippets

```java
System.out.println("Hello Akarsh");
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// Linear Search
public static int linearSearch(int[] arr, int item) {
    for (int i = 0; i < arr.length; i++) {
        if (arr[i] == item) {
            return i;
        }
    }
    return -1;
}

// Maximum value in an array
public static int maxValue2(int[] arr) {
    int max = Integer.MIN_VALUE;
    for (int i = 0; i < arr.length; i++) {
        if (arr[i] > max) {
            max = arr[i];
        }
    }
    return max;
}

// Reverse printing an array
public static void reversePrint(int[] arr) {
    for (int i = arr.length - 1; i >= 0; i--) {
        System.out.print(arr[i] + " ");
    }
    System.out.println();
}

// Reversing an array
public static void reverseArray(int[] arr) {
    int i = 0;
    int j = arr.length-1;
    while (i < j) {
        int temp = arr[i];
        arr[i] = arr[j];
        arr[j] = temp;
        i++;
        j--;
    }
}

// Binary Search
```

```java
public static int binarySearch(int[] arr, int item) {
    int n = arr.length;
    int low = 0;
    int high = n - 1;
    while (low <= high) {
        int mid = (low + high) / 2;
        if (arr[mid] == item) {
            return mid;
        } else if (arr[mid] > item) {
            high = mid - 1;
        } else {
            low = mid + 1;
        }
    }
    return -1;
}

int n = 566789;
int i = 0;

while (i < n) {
    // System.out.println("Hello Akarsh");
    i++;
}

while (i <= n) {
    // System.out.println("Hello Akarsh");
    i *= 2;
}

while (n > 0) {
    // System.out.println("Hello Akarsh");
    n /= 2;
}

while (i <= n) {
    // System.out.println("Hello Akarsh");
    i += 2;
    i += 3;
}

while (i <= n) {
    // System.out.println("Hello Akarsh");
    i *= 2;
    i *= 3;
}

while (n > 0) {
    // System.out.println("Hello Akarsh");
    n /= 2;
    n /= 3;
}

int k = 2;
```

```java
while (i <= n) {
    // System.out.println("Hello Akarsh");
    i += k;
}

while (i <= n) {
    // System.out.println("Hello Akarsh");
    i *= k;
}

for (i = 1; i <= n; i++) {
    for (int j = 1; j <= n; j++) {
        // System.out.println("Hello Akarsh");
    }
}

for (i = 1; i * i <= n; i++) {
    // System.out.println("Hello Akarsh");
}

for (i = 1; i <= n; i++) {
    for (int j = 1; j <= i * i; j++) {
        for (k = 1; k <= n / 2; k++) {
            // System.out.println("Hello Akarsh");
        }
    }
}

for (i = 1; i <= n; i *= 2) {
    // System.out.println("Hello Akarsh");
}

for (i = n / 2; i <= n; i++) {
    for (int j = 1; j <= n / 2; j++) {
        for (k = 1; k <= n; k = k * 2) {
            // System.out.println("Hello Akarsh");
        }
    }
}

for (i = 1; i <= n; i++) {
    for (int j = 1; j <= n; j += i) {
        // System.out.println("Hello Akarsh");
    }
}
```