

Foundation Exam-Summer 2021-Section 2B

1. There are 10 blanks, the "order" is from top to bottom, and left to right of each line of code.

(1) return eval(values, perm, n);
(2) $k! = i$
(3) values[n]
(4) $k + 1$
(5) n
(6) values[i]
(7) $n - 1$
(8) values[perm[i]]
(9) values[perm[i+1]]
(10) 1

2. a)

2nd it.	6	9	13	44	18	22	3	11
3rd it.	6	9	13	44	18	22	3	11
4th it.	6	9	13	18	44	22	3	11
5th it.	6	9	13	18	22	44	3	11
6th it.	3	6	9	13	18	22	44	11

- b) i. n^2
ii. n^2
iii. $n \log n$
iv. $n \log n$
v. n^2

(question 3 on back)

1011010	10100
0110100	01001
0010000	00000

AND = 0 = disjoint

```

3. int disjoint(int set1, int set2)
    if((set1 & set2) == 0) return 1;
    return 0;

```

3