Question 1: Code Writing Write a function definition with the following expectations:

- The function name is odd_and_even and is called with a `list[int]` as an argument.
- The function should return a `list[int]`.
- The function should return a new list containing the elements of the input list that are odd and have an even index.
- The function should not mutate (modify) the input list.
- Explicitly type variables, parameters, and return types. (The autograder won't check for this, but it's good practice for the quiz!)
- The following REPL examples demonstrate expected functionality of your `odd_and_even` function:
- If using the autograder, save your file as odd_and_even.py.

```
1  >>> odd_and_even([2,3,4,5])
2  []
3  >>> odd_and_even([7, 8, 10, 10, 5, 12, 3, 2, 11, 8])
4  [7, 5, 3, 11]
```

1.1. Write your function definition here: