**Supporting note №37-38 for the student**

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| **Темазанятия/Theme of the lesson** | | **SEARCH ELEMENT IN A LIST**  **Поиск элемента в списке** | | | |
| **Цели занятия/Lesson objectives** | | ***Способствовать формированию пользовательских компетенций и расширению знаний о поиске элементов в списке в Python*** | | | |
| **Запланированныеэтапызанятия/ *Time*** | **Деятельность учителя**  **Teacher activities** | | **Деятельность ученика**  **Student activities** | **Типоценивания**  **Type of assessment** | **Ресурсы**  **Resources** |
| **Начало занятия/Beginning of lesson**  **Середина занятия/ Middle of lesson**  **Конец занятия/End of lesson** | Greeting and organizing moment.  Good morning, students. Smile each other because you will work together  Welcome to this lesson.  You will:   * Methods of searching elements in list.   Please write the title in your notebooks: **SEARCH ELEMENT IN A LIST**  Question:  **Do you have any method to find anything fast?** (Есть ли у вас какой-нибудь способ быстро что-нибудь найти?)  Ways to check if element exists in a list.  List is an important container in python as it stores elements of all the data types as a collection. Now you will learn one of the basic list operations of ways to check the existence of an element in a list (Способы проверки наличия элемента в списке.Список является важным контейнером в python, поскольку в нем хранятся элементы всех типов данных в виде коллекции. Теперь вы изучите одну из основных операций со списком способов проверки наличия элемента в списке.)  Activity1  Find the words  At the lesson we will use new words. Look at Vocabulary, read after me in chorus.   * loop – цикл – цикл * element – элемент – элемент * initialize – инициализациялау – инициализировать * conventional – дəстүрлі – обычный   **Now write these words into your notebooks.**  **Method #1: using loop**  This method uses a loop that iterates through all the elements to check the existence of the target element. This is the simplest way to check the existence of the element in the list.  Example 1  Initializing list  my\_list = [ 1, 6, 3, 5, 3, 4 ]  print('Checking if 4 exists in list (using loop):')  for i in my\_list:  if(i == 4) :  print ('Element Exists')  **Method #2: using “in”**  Python in is the most conventional way to check if an element exists in list or not. This particular way returns True if element exists in list and False if the element does not exist in the list. The list need not be sorted to practice this approach of checking.  Example 2  # Checking if 4 exists in list using in  if (4 in my\_list):  print (“Element Exists”)  Output  Checking if 4 exists in list (using in):  Element Exists  **Method #3: using set() + in**  Converting the list into set and then using “in” can possibly be more effi  cient than only using “in”. But having effi ciency for a plus also has certain negatives. One among them is that the order of list is not preserved, and if you opt to take a new list for it, you would require to use extra space. Another drawback is that set disallows duplication and hence duplicate elements would be removed from the original list.  Example 3  # Initializing list  list\_set = [ 1, 6, 3, 5, 3, 4 ]  print(“Checking if 4 exists in list (using set()+in):“)  list\_set = set(list\_set)  if 4 in list\_set :  print (“Element Exists”)  Output  Checking if 4 exists in list (using set()+in):  Element Exists  Practice 1  1. Create and initialize a list;  2. Enter random 10 numbers into the list;  3. Input any number you like;  4. The program should check the number you like exists in the list;  5. Use different methods.  Practice 2  1. Create two lists;  2. Add 5 elements to the fi rst list using append() method;  3. Add 5 elements to the second list using extend() method;  4. The program should check the number you like exists in the list;  5. Check all items and print out elements that exist in both lists.  Hint: use for loop and in method.  **Literacy**  Explain the pros and cons of different ways of checking existence of  element in the list (*Объясните плюсы и минусы различных способов проверки наличия*  *элемента в списке).*  **Reflection**"The Ladder of success" | | Tune in to the lesson  Compliment  https://2.bp.blogspot.com/-lfKEwxHho8w/V5EYXd79CxI/AAAAAAAAAKg/4JJ_xO423WwwfOAUa6KAoykTyTW1n3_uQCLcB/s1600/Compliments-2.jpg  write down the topic  Answer questions  Doing the job  Write down the words  Watching a video  Answer questions  Doing the job  They remember  Group work  comment on the examples  Doing the job  Doing the job  Attach stickers | Positive mood, willingness to cooperate.  Praise  Approval  Mutual verification  Praise  Praise  Approval  Mutual verification  Praise  Mutual verification  Praise | Презентация  Презентация  Презентация  <https://youtu.be/jZ3HHuo46_U>  Презентация  Презентация  Презентация  Раздаточный материал |