



# SOURCES PRESENTATION

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# Goals

- provide flexible exercising environment for the preparation for the certifications
- minimize the time and effort needed to feel prepared for the certification exam
- collect multiple theory sources in one place, so that instead of surfing the internet IBM employees can browse the prepared links in the app
- personal: increase proficiency in Java Enterprise and multiplatform development using Spring Boot and React Native respectively

# Similar theses

No apps for the certification or the exam preparation were created as a bachelor thesis on the Faculty of Mathematics, Physics and Informatics of Comenius University.

Bachelor thesis of Martin Reguly "Interaktívne laboratórium na výučbu programovania" (2019) provides a testing environment for Python lessons.

**Lessons**

- Podprogramy 6/7
- Delitelne
- Sucet Delitelov
- Dokonale
- NajmensiDelitel
- Pocet Delitelov
- Je Prvocislo
- Samohlasky

**Delitelne**

Napište funkciu vypis\_delitele(cislo), ktorá vytvorí znakový retazec so všetkými deliteľmi daného čísla a vráti ho.

**Code Here**

```
1 def vypis_delitele(cislo):
2     s = ''
3     for i in range(1, cislo+1):
4         if i == 1:
5             s += str(i)
6         else:
7             if cislo % i == 0:
8                 s += " " + str(i)
9
10    return s
11
12 print(vypis_delitele(25))
13
```

**Output Window**

Formatted code from docker container goes here.

**Tests**

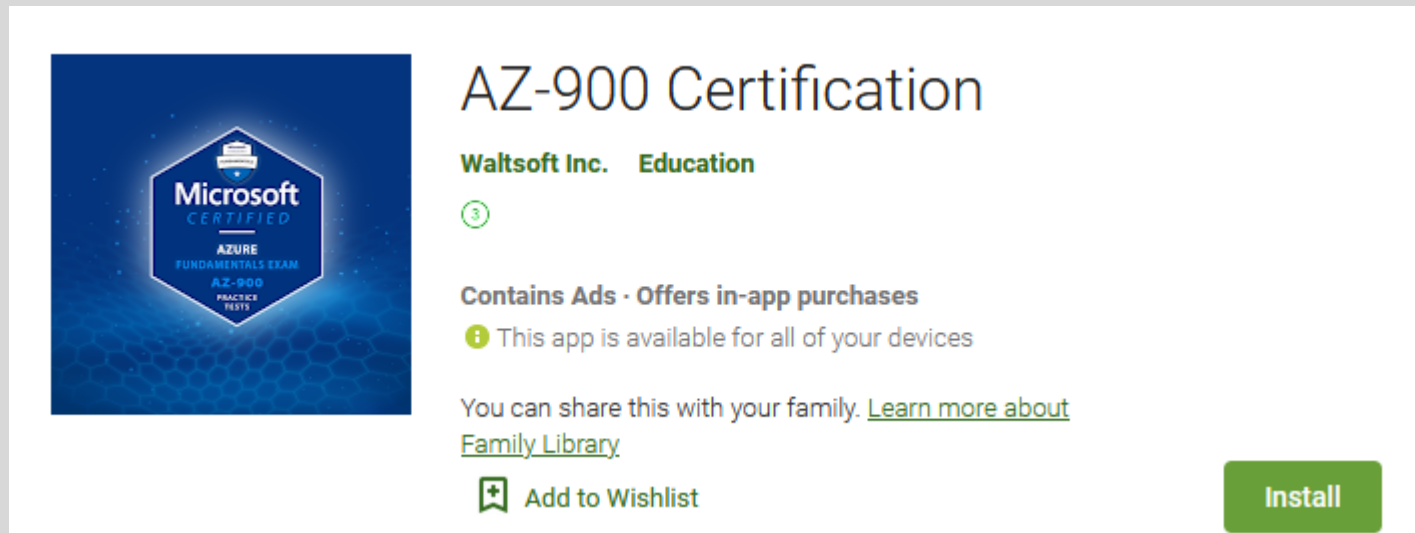
Edit	Result	Input	Correct Answer
Edit	CORRECT	24	"1 2 3 4 6 8 12 24"

# Similar apps

This app provides several practice tests to help prepare for the Microsoft Azure Fundamentals certification.

Advantages: statistics page, tracking progress for each test

Disadvantages: only Microsoft Azure certifications, lots of ads, only one type of questions



**AZ-900 Certification**


Waltsoft Inc. Education


3

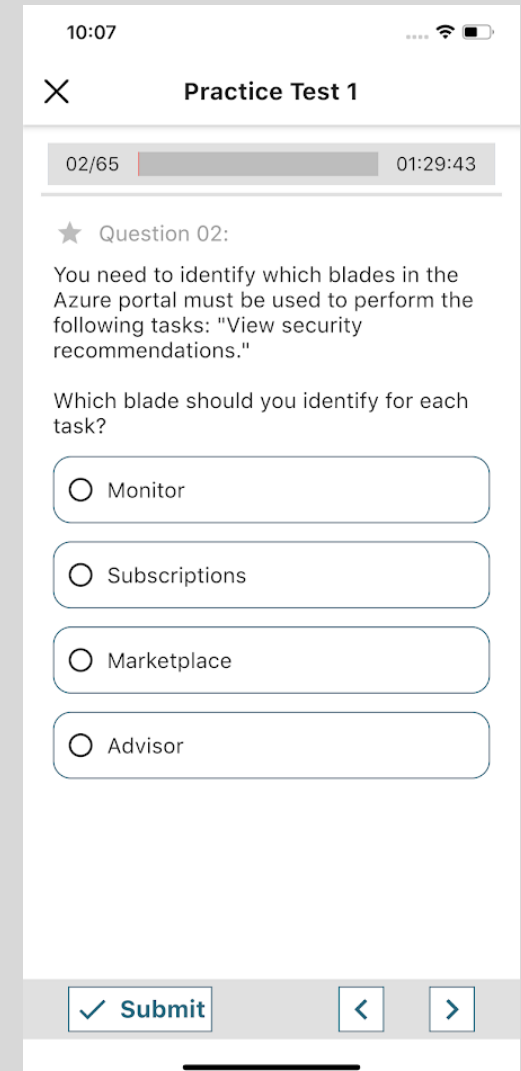
Contains Ads · Offers in-app purchases

*i* This app is available for all of your devices

You can share this with your family. [Learn more about Family Library](#)

 Add to Wishlist





10:07

Practice Test 1




02/65 01:29:43

★ Question 02:

You need to identify which blades in the Azure portal must be used to perform the following tasks: "View security recommendations."

Which blade should you identify for each task?

- Monitor
- Subscriptions
- Marketplace
- Advisor

# Similar apps

Certification Questions is a free app that allows to take tests for different certifications.

Advantages: several tests for each certification, results tracking

Disadvantages: no answer field, no automatic answer check

The image shows the Google Play Store listing for the app 'Certification Questions – Free Exams & Dumps'. The app icon is a blue square with a white lightbulb inside a head silhouette. The title is 'Certification Questions – Free Exams & Dumps'. Below the title, it says 'certification-questions.com Education' and has a 4.5-star rating with 623 reviews. There is a green 'Install' button at the bottom right. A note indicates the app is available for all devices. A link to 'Learn more about Family Library' is also present.

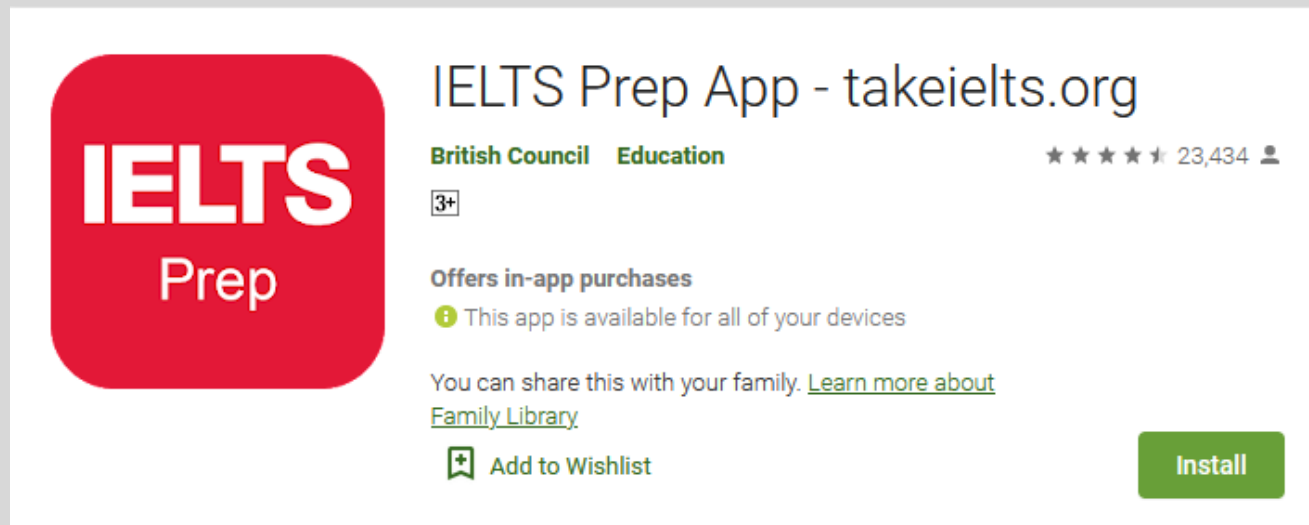
The screenshot shows the app's interface during a test. At the top, it says 'Test 6' and 'Lifetime'. There are 9 question indicators, with the 4th one highlighted. A timer shows '01:59:49'. Below the indicators, it says 'Question 4/9' and 'Mark'. The question text is: 'Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution. After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen. You are a system administrator at your company. Your company recently acquired two of its competitors, as well as their IT infrastructure. The acquired companies have applications that are written in Java, .NET, Ruby, php, Node.js, and other languages. The applications run on Linux and Windows Server in Amazon Web Services, Azure, and SAP Cloud Platform. The applications require access to the Azure Service Broker, and must be managed by the PCF Ops Manager. You need to consolidate the applications onto a single cloud provider in Azure. Solution: Deploy the open-source Cloud Foundry packages by setting up a BOSH director. Does the solution meet the goal?'. Below the question, there is an 'Answers' section with two options: 'A) Yes' and 'B) No'. At the bottom, there are three buttons: 'Explain', 'Marked Questions', and 'Submit'.

# Similar apps

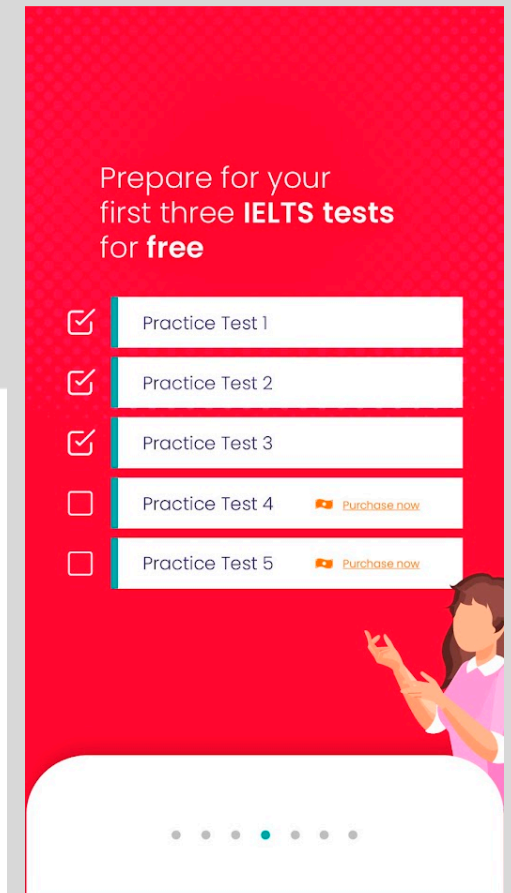
IELTS Prep app - the app developed by British Council for the preparation to the IELTS exam. Provides lots of practice tests for both Academic and General categories of tests. Users can also choose to prepare for a specific test category: Reading, Listening, Writing and Speaking.

Advantages: good categorization

Disadvantages: no test pausing, so you have to complete the whole test (~2 hrs) at once



The screenshot shows the App Store listing for the IELTS Prep App. The app icon is a red rounded square with 'IELTS Prep' in white text. The title is 'IELTS Prep App - takeielts.org'. The developer is 'British Council' in the 'Education' category. It has a 4.5-star rating from 23,434 reviews and is rated '3+'. A note indicates it offers in-app purchases and is available for all devices. There is a link to 'Learn more about Family Library' and an 'Add to Wishlist' button. A green 'Install' button is at the bottom right.



The screenshot shows the app's main screen with a red background. At the top, it says 'Prepare for your first three IELTS tests for free'. Below this is a list of five practice tests, each with a checkbox on the left. The first three tests (Practice Test 1, 2, and 3) have their checkboxes checked. The last two tests (Practice Test 4 and 5) have their checkboxes unchecked and a 'Purchase now' button next to them. At the bottom right, there is an illustration of a woman in a pink shirt clapping. A white bar at the very bottom contains five dots, with the second dot from the left being filled, indicating the current slide in a carousel.

# Sources

1. Spring Boot documentation [<https://spring.io/projects/spring-boot>]
2. MongoDB documentation [<https://docs.mongodb.com/>]
3. React Native documentation [<https://reactnative.dev/docs/getting-started>]
4. Expo documentation [<https://docs.expo.dev/>]
5. RAML documentation [<https://raml.org/>]
6. Swagger UI documentation [<https://swagger.io/docs/>]
7. Will be updated throughout the development...



Thanks for your attention.