### *Ex. 22 Read and translate text # 4 “Conducting research”* My name is Sergei Ivanov, and I'm currently working on my master's degree in Computer Science at Kazan Federal University. My research focuses on designing and improving algorithms to optimize data processing workflows. This work aims to enhance decision-making in various sectors by creating and refining algorithmic solutions.

My research is both theoretical and practical, particularly in analyzing large datasets and their impacts on dynamic information systems. I have been engaged in this area for the past three years, spurred by an interest that began during my undergraduate studies.

The importance of this research is significant, as data plays an increasingly crucial role in business and science. Effective data analysis techniques are vital for improving the effectiveness and reliability of information systems. Additionally, I am exploring advanced data modeling strategies to highlight the importance of this field.

My main goal is to investigate how different data architectures and computational methods affect the reliability and efficiency of information systems.

The theoretical developments from my research may serve as a foundation for future studies aimed at enhancing the operational efficiency of these systems. Practically, the methods and outcomes of my research could help industries streamline data processing and improve the quality of insights from large datasets.

My research process includes several steps: conducting literature reviews, selecting algorithms, designing experiments, analyzing results, and applying findings to real-world scenarios. I plan to conduct my experiments at the computer facilities of Kazan Federal University.

I receive support from my advisor, Dr. A., who leads the Computer Science Department. I frequently consult him for guidance on research challenges, and our discussions about my collected datasets have been invaluable for understanding algorithm performance.

Although I am still in the early experimental phase, I have built a strong theoretical foundation. I actively participate in scientific conferences to present my research findings and network with other researchers. To date, I have published three research papers.

I aim to complete my thesis by the end of next year and present it to the Academic Council at Kazan Federal University. Ultimately, my goal is to earn my master’s degree in Computer Science.  
 ***Ex. 23 Provide answers to comprehension and multiple-choice questions based on the information given in the text and complete some extra tasks to text:***

***a. Comprehension questions:***

1. What motivated Sergei Ivanov to pursue research in algorithms for data processing?

2. How does Sergei envision the practical applications of his research findings?

3. In what ways does Sergei believe his research can contribute to enhancing the operational efficiency of information systems?

4. Describe the role of Dr. A. in Sergei’s research process and how his guidance impacts Sergei's work.

5. What are the key steps in Sergei's research process, and why are each of these steps important?

## **Ex. 23 a. Comprehension Questions**

**1. What motivated Sergei Ivanov to pursue research in algorithms for data processing?**  
**English:** He became interested in data processing and algorithms during his undergraduate studies.  
**Русский:** Он заинтересовался обработкой данных и алгоритмами ещё во время бакалавриата.

**2. How does Sergei envision the practical applications of his research findings?**  
**English:** His research can help industries streamline data processing and improve insights from large datasets.  
**Русский:** Его исследование может помочь промышленности оптимизировать обработку данных и улучшить вывод информации из больших наборов данных.

**3. In what ways does Sergei believe his research can contribute to enhancing the operational efficiency of information systems?**  
**English:** Theoretical developments can serve as a foundation for future studies, and practical methods can improve system reliability and efficiency.  
**Русский:** Теоретические результаты могут стать основой для будущих исследований, а практические методы — повысить надёжность и эффективность систем.

**4. Describe the role of Dr. A. in Sergei’s research process and how his guidance impacts Sergei's work.**  
**English:** Dr. A. provides guidance on research challenges and helps Sergei understand algorithm performance through discussions about datasets.  
**Русский:** Доктор А. помогает в решении исследовательских задач и объясняет работу алгоритмов через обсуждения собранных данных.

**5. What are the key steps in Sergei's research process, and why are each of these steps important?**  
**English:** The steps are: literature review, algorithm selection, experiment design, result analysis, and applying findings. Each step ensures reliable and useful research outcomes.  
**Русский:** Шаги: обзор литературы, выбор алгоритмов, планирование экспериментов, анализ результатов, применение выводов. Каждый шаг важен для получения надёжных и полезных результатов.

***b. Multiple-Choice Questions:***

1. What is the primary focus of Sergei Ivanov's research?

- A) Theoretical physics

- B) Enhancing data processing algorithms

- C) Machine learning applications

- D) Web development

2. How long has Sergei been engaged in his current research area?  
 - A) One year

- B) Two years

- C) Three years

- D) Five years

3. What kind of support does Sergei receive from his advisor?  
 - A) Financial support for studies

- B) Guidance on research challenges

- C) Access to research facilities

- D) Opportunities to teach classes

4. How many research papers has Sergei published to date?  
 - A) One

- B) Two

- C) Three

- D) Four

5. When does Sergei aim to complete his thesis?  
- A) By the end of this year

- B) By the end of next year

- C) In two years

- D) When he finishes all of his coursework

## **Ex. 23 b. Multiple-Choice Questions**

1. What is the primary focus of Sergei Ivanov's research?  
   **Answer:** B) Enhancing data processing algorithms  
   **Русский:** B) Улучшение алгоритмов обработки данных
2. How long has Sergei been engaged in his current research area?  
   **Answer:** C) Three years  
   **Русский:** C) Три года
3. What kind of support does Sergei receive from his advisor?  
   **Answer:** B) Guidance on research challenges  
   **Русский:** B) Руководство и помощь в исследовательских задачах
4. How many research papers has Sergei published to date?  
   **Answer:** C) Three  
   **Русский:** C) Три
5. When does Sergei aim to complete his thesis?  
   **Answer:** B) By the end of next year  
   **Русский:** B) К концу следующего года