62 IBM RPG interview questions to ask your applicants

Questions

1. Can you explain what RPG stands for and its primary use in business applications?

2. How does RPG differ from other programming languages you've worked with?

3. Describe a challenging RPG project you've worked on and how you overcame any obstacles.

4. How do you ensure code maintainability when working with RPG?

5. How do you approach integrating RPG applications with modern web technologies?

6. What strategies do you use for optimizing RPG program performance?

7. How do you stay updated with the latest developments in RPG and IBM i technology?

8. Can you explain the concept of ILE (Integrated Language Environment) and its benefits for RPG programming?

9. What are the primary data types used in RPG, and how do you choose which to use?

10. Can you describe how to use arrays in RPG and provide an example of their application?

11. Explain the difference between fixed-format and free-format RPG. Which one do you prefer and why?

12. How do you handle file I/O operations in RPG?

13. What are subfiles and how do you use them in RPG development?

14. Can you explain how error handling is managed in RPG?

15. Describe the process of debugging an RPG program.

16. What are activation groups in RPG, and why are they important?

17. How do you implement modular programming in RPG?

18. Can you describe the use of data structures in RPG? Provide an example of when you would use them.

19. What are indicators in RPG, and how are they used?

20. How do you manage and use built-in functions in RPG?

21. Explain how to use prototypes and procedure interfaces in RPG.

22. What is the significance of the H-spec in RPG?

23. How do you perform string manipulation in RPG?

24. Describe the process of working with multi-format logical files in RPG.

25. Can you explain the role of *INLR in RPG and its impact on program execution?

26. What are some common built-in functions (BIFs) in RPG, and how do you use them?

27. How do you approach testing and validating RPG programs?

28. Can you describe an RPG cycle and its components?

29. Can you describe the different debugging tools available for RPG and how you use them?

30. How do you approach debugging when you encounter an unexpected error in an RPG program?

31. How do you handle debugging in a production environment where changes must be minimal?

32. What strategies do you use for identifying and fixing performance issues in RPG programs?

33. Can you explain how you use logging to debug RPG programs?

34. How do you debug issues that only occur under specific conditions or with particular data sets in RPG?

35. What are some common pitfalls in RPG programming that can lead to bugs, and how do you avoid them?

36. How do you document the debugging process for future reference or for team members?

37. Can you describe a time when you found a particularly tricky bug in an RPG program? How did you resolve it?

38. How would you optimize an RPG program that processes large volumes of data?

39. What techniques do you use to reduce the number of I/O operations in an RPG program?

40. Can you explain the benefits of using SQL in RPG programs for data access?

41. How do you minimize the use of work fields in RPG to improve performance?

42. What role does proper indexing play in optimizing RPG programs that access databases?

43. How can you use compiler directives to optimize RPG code?

44. What strategies do you employ to reduce CPU usage in RPG programs?

45. How do you optimize RPG programs that involve complex calculations?

46. Can you describe how to use embedded SQL effectively in RPG for better performance?

47. What are some common RPG coding practices that can lead to poor performance?

48. How do you optimize memory usage in RPG programs?

49. Can you explain the benefits of using static binding for service programs in RPG?

50. How do you approach optimizing legacy RPG code without completely rewriting it?

51. You've been tasked with modernizing a legacy RPG program. How would you approach this project, and what steps would you take to ensure a smooth transition?

52. A client reports that their RPG application is running slowly during peak hours. How would you diagnose and address this performance issue?

53. You need to integrate an existing RPG application with a new web service. What considerations would you keep in mind, and how would you implement this integration?

54. Your team is transitioning from fixed-format to free-format RPG. How would you manage this transition and ensure code consistency across the project?

55. You've discovered a critical bug in a production RPG program. What steps would you take to identify, fix, and deploy the solution with minimal disruption?

56. A junior developer on your team is struggling with RPG concepts. How would you mentor them and help improve their skills?

57. You need to implement a new feature that requires complex data manipulation in RPG. How would you approach this task to ensure efficiency and maintainability?

58. Your RPG application needs to interact with a REST API. How would you implement this functionality within the RPG program?

59. You're tasked with improving the security of an existing RPG application. What areas would you focus on, and what changes would you recommend?

60. A client wants to migrate their RPG application to the cloud. What considerations and steps would you take to facilitate this migration?