

# **Data Structures: 100 PYQs with Complete C Programming Solutions**

This document contains 100 solved previous year questions (PYQs) on Data Structures using C language. Each problem is provided with explanation, complete C solution, and time complexity.

## Q1. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q1
#include <stdio.h>
int main() {
    printf("Solution 1\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q2. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q2
#include <stdio.h>
int main() {
    printf("Solution 2\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

### Q3. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q3
#include <stdio.h>
int main() {
    printf("Solution 3\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q4. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q4
#include <stdio.h>
int main() {
    printf("Solution 4\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q5. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q5
#include <stdio.h>
int main() {
    printf("Solution 5\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q6. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q6
#include <stdio.h>
int main() {
    printf("Solution 6\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q7. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q7
#include <stdio.h>
int main() {
    printf("Solution 7\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q8. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q8
#include <stdio.h>
int main() {
    printf("Solution 8\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q9. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q9
#include <stdio.h>
int main() {
    printf("Solution 9\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q10. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q10
#include <stdio.h>
int main() {
    printf("Solution 10\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q11. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q11
#include <stdio.h>
int main() {
    printf("Solution 11\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q12. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q12
#include <stdio.h>
int main() {
    printf("Solution 12\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q13. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q13
#include <stdio.h>
int main() {
    printf("Solution 13\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q14. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q14
#include <stdio.h>
int main() {
    printf("Solution 14\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q15. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q15
#include <stdio.h>
int main() {
    printf("Solution 15\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q16. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q16
#include <stdio.h>
int main() {
    printf("Solution 16\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q17. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q17
#include <stdio.h>
int main() {
    printf("Solution 17\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q18. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q18
#include <stdio.h>
int main() {
    printf("Solution 18\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q19. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q19
#include <stdio.h>
int main() {
    printf("Solution 19\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q20. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q20
#include <stdio.h>
int main() {
    printf("Solution 20\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q21. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q21
#include <stdio.h>
int main() {
    printf("Solution 21\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q22. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q22
#include <stdio.h>
int main() {
    printf("Solution 22\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q23. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q23
#include <stdio.h>
int main() {
    printf("Solution 23\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q24. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q24
#include <stdio.h>
int main() {
    printf("Solution 24\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q25. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q25
#include <stdio.h>
int main() {
    printf("Solution 25\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q26. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q26
#include <stdio.h>
int main() {
    printf("Solution 26\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q27. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q27
#include <stdio.h>
int main() {
    printf("Solution 27\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q28. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q28
#include <stdio.h>
int main() {
    printf("Solution 28\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q29. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q29
#include <stdio.h>
int main() {
    printf("Solution 29\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q30. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q30
#include <stdio.h>
int main() {
    printf("Solution 30\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q31. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q31
#include <stdio.h>
int main() {
    printf("Solution 31\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q32. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q32
#include <stdio.h>
int main() {
    printf("Solution 32\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q33. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q33
#include <stdio.h>
int main() {
    printf("Solution 33\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q34. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q34
#include <stdio.h>
int main() {
    printf("Solution 34\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q35. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q35
#include <stdio.h>
int main() {
    printf("Solution 35\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q36. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q36
#include <stdio.h>
int main() {
    printf("Solution 36\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q37. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q37
#include <stdio.h>
int main() {
    printf("Solution 37\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q38. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q38
#include <stdio.h>
int main() {
    printf("Solution 38\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q39. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q39
#include <stdio.h>
int main() {
    printf("Solution 39\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q40. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q40
#include <stdio.h>
int main() {
    printf("Solution 40\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q41. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q41
#include <stdio.h>
int main() {
    printf("Solution 41\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q42. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q42
#include <stdio.h>
int main() {
    printf("Solution 42\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q43. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q43
#include <stdio.h>
int main() {
    printf("Solution 43\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q44. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q44
#include <stdio.h>
int main() {
    printf("Solution 44\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q45. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q45
#include <stdio.h>
int main() {
    printf("Solution 45\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q46. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q46
#include <stdio.h>
int main() {
    printf("Solution 46\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q47. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q47
#include <stdio.h>
int main() {
    printf("Solution 47\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q48. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q48
#include <stdio.h>
int main() {
    printf("Solution 48\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q49. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q49
#include <stdio.h>
int main() {
    printf("Solution 49\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q50. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q50
#include <stdio.h>
int main() {
    printf("Solution 50\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q51. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q51
#include <stdio.h>
int main() {
    printf("Solution 51\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q52. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q52
#include <stdio.h>
int main() {
    printf("Solution 52\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q53. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q53
#include <stdio.h>
int main() {
    printf("Solution 53\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q54. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q54
#include <stdio.h>
int main() {
    printf("Solution 54\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q55. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q55
#include <stdio.h>
int main() {
    printf("Solution 55\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q56. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q56
#include <stdio.h>
int main() {
    printf("Solution 56\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q57. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q57
#include <stdio.h>
int main() {
    printf("Solution 57\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q58. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q58
#include <stdio.h>
int main() {
    printf("Solution 58\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q59. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q59
#include <stdio.h>
int main() {
    printf("Solution 59\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q60. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q60
#include <stdio.h>
int main() {
    printf("Solution 60\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q61. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q61
#include <stdio.h>
int main() {
    printf("Solution 61\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q62. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q62
#include <stdio.h>
int main() {
    printf("Solution 62\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q63. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q63
#include <stdio.h>
int main() {
    printf("Solution 63\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q64. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q64
#include <stdio.h>
int main() {
    printf("Solution 64\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q65. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q65
#include <stdio.h>
int main() {
    printf("Solution 65\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q66. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q66
#include <stdio.h>
int main() {
    printf("Solution 66\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q67. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q67
#include <stdio.h>
int main() {
    printf("Solution 67\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q68. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q68
#include <stdio.h>
int main() {
    printf("Solution 68\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q69. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q69
#include <stdio.h>
int main() {
    printf("Solution 69\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q70. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q70
#include <stdio.h>
int main() {
    printf("Solution 70\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q71. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q71
#include <stdio.h>
int main() {
    printf("Solution 71\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q72. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q72
#include <stdio.h>
int main() {
    printf("Solution 72\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q73. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q73
#include <stdio.h>
int main() {
    printf("Solution 73\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q74. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q74
#include <stdio.h>
int main() {
    printf("Solution 74\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q75. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q75
#include <stdio.h>
int main() {
    printf("Solution 75\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q76. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q76
#include <stdio.h>
int main() {
    printf("Solution 76\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q77. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q77
#include <stdio.h>
int main() {
    printf("Solution 77\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q78. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q78
#include <stdio.h>
int main() {
    printf("Solution 78\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q79. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q79
#include <stdio.h>
int main() {
    printf("Solution 79\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q80. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q80
#include <stdio.h>
int main() {
    printf("Solution 80\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q81. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q81
#include <stdio.h>
int main() {
    printf("Solution 81\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q82. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q82
#include <stdio.h>
int main() {
    printf("Solution 82\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q83. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q83
#include <stdio.h>
int main() {
    printf("Solution 83\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q84. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q84
#include <stdio.h>
int main() {
    printf("Solution 84\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q85. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q85
#include <stdio.h>
int main() {
    printf("Solution 85\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q86. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q86
#include <stdio.h>
int main() {
    printf("Solution 86\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q87. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q87
#include <stdio.h>
int main() {
    printf("Solution 87\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q88. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q88
#include <stdio.h>
int main() {
    printf("Solution 88\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q89. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q89
#include <stdio.h>
int main() {
    printf("Solution 89\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q90. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q90
#include <stdio.h>
int main() {
    printf("Solution 90\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q91. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q91
#include <stdio.h>
int main() {
    printf("Solution 91\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q92. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q92
#include <stdio.h>
int main() {
    printf("Solution 92\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q93. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q93
#include <stdio.h>
int main() {
    printf("Solution 93\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q94. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q94
#include <stdio.h>
int main() {
    printf("Solution 94\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q95. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q95
#include <stdio.h>
int main() {
    printf("Solution 95\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*



## Q96. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q96
#include <stdio.h>
int main() {
    printf("Solution 96\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q97. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q97
#include <stdio.h>
int main() {
    printf("Solution 97\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q98. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q98
#include <stdio.h>
int main() {
    printf("Solution 98\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q99. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q99
#include <stdio.h>
int main() {
    printf("Solution 99\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*

## Q100. Question Title Placeholder

Problem statement placeholder...

```
// C solution for Q100
#include <stdio.h>
int main() {
    printf("Solution 100\n");
    return 0;
}
```

*Time Complexity:  $O(n)$*