# Practice Problem Set 3

1. Write a C program that takes an integer *n* as input and print all odd numbers from 1 to n.  
   Examples

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| --- |
| Input |
| 10 |
| Output |
| 1 3 5 7 9 |

1. Write a C program that takes an integer n as input and print first n odd positive integers.  
   Examples

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| --- |
| Input |
| 10 |
| Output |
| 1 3 5 7 9 11 13 15 17 19 |

1. Write a C program that takes two integers a, bas inputs and print all multiples of 3 in range [a, b].  
   Examples

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| --- |
| Input |
| 10 21 |
| Output |
| 12 15 18 21 |

1. Write a C program that takes two integers *x* and *n* as input and calculate using loop.

Examples

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| Input |
| 2 3 |
| Output |
| 8 |

1. Write a C program that takes an integer *n* as input and calculates the summation of the following series for first n terms.

Examples

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| --- |
| Input |
| 3 |
| Output |
| 972 |

1. Write a C program that takes an integer *n* as input and calculate the summation of the following series for first n terms.

Examples

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| --- |
| Input |
| 3 |
| Output |
| 17 |

1. Write a C program that takes an integer *n* as input and calculate the summation of the following series for first n terms.

Examples

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| --- |
| Input |
| 3 |
| Output |
| 102 |

1. Write a C program that takes an integer *n* as input and calculate the summation of the following series for first n terms.

Examples

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| Input |
| 10 |
| Output |
| 4290 |

1. Write a C program to count the divisors of a number.  
   Examples

|  |
| --- |
| Input |
| 18 |
| Output |
| 6 |

1. Write a C program to count the odd divisors of a number.  
   Examples

|  |
| --- |
| Input |
| 18 |
| Output |
| 2 |

1. Write a C program to print the digits of a number using loop.

Examples

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| --- |
| Input |
| 1234 |
| Output |
| 4 3 2 1 |

1. Write a C program to reverse a number using loop.

Examples

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| --- |
| Input |
| 1234 |
| Output |
| 4321 |

1. Write a C program to check if a given number is an Armstrong number or not.  
   Hints: An Armstrong number is a number that is equal to the sum of cubes of its digits, e.g.  
   Examples

|  |  |
| --- | --- |
| Input | Input |
| 1634 | 1234 |
| Output | Output |
| Armstrong Number | Not an Armstrong Number |