

	Test case: Command and input	Expected result	Coverage
Normal "from decimal" conversion	from_decimal (23,2) from_decimal (230,16) from_decimal (2345,26)	10111 E6 3C5	Line 1-24
Incorrect number/base "from decimal" conversion	from_decimal (-34,2) from_decimal (15, -10) from decimal (12,37)	Error: negative number Error: negative base Error: base > 36	Line 1-11
Normal "to decimal" conversion	to_decimal ("1010",2) to_decimal ("234", 5) to_decimal ("1CB",26) to_decimal ("AB",12) to_decimal ("45",10) to_decimal ("ABC",16)	10 69 999 131 45 2748	Line 25-56
Incorrect number/base "to decimal" conversion	to_decimal ("A",10) to_decimal ("A",5) to_decimal ("5",0) to_decimal ("-12", 16) to_decimal ("A", -16) to_decimal ("45",37)	Error: incorrect number/ base Error: incorrect number/ base Error: incorrect number/ base Error: negative number Error: negative base Error: base > 36	Line 25-45

<From decimal>

Enter s, b

Is b < 0?

If yes, then

Return "Error: negative base"

Is s < 0?

If yes, then

Return "Error: negative number"

Is b > 36?

If yes, then

Return "Error: base > 36"

End if

Set r = ""

While s > 0

Convert the remainder value of s divided by b by calling the method name "re_val" and added to r

Divided s by b

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Reverse r
Return r
<re_val method>
Enter num
Is num >= 0 and num <= 9?
If yes, then
    Return chr (num + 48)
Else
    Return chr (num - 10 + 65)
<To decimal>
Enter s, base
Set lenn = length of s
Set power = 1, num = 0
Set i = lenn-1
Is i > -1?
If no, then
    return num
else
    is base < 0?
    If yes, then
        Return "Error: negative base"
    Is '-' in s?
    If yes, then
        Return "Error: negative number"
    Is base > 36
    If yes, then
        Return "Error: base > 36"
    Is decimal value of s[i] convert by calling method "val" >= base or base == 0?
    If yes, then
        Return "Error: incorrect number/base"
    End if
    num = num + decimal value of s[i] convert by calling method "val" * power
    power = power * base
    decrement i by 1
    go back to the loop
<val method>
Enter c
Is c >= '0' and c <= '9'?
If yes, then
    Return ord(c) - 48
Else
    Return ord(c) - 65 + 10

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