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# Nsc:

## #menu 1

Prompt the user to enter a letter A or B

Input(query)

If query == ‘A’

## #menu2

Input(num)

Prompt the user to enter a letter A, B, C or D representing the base of the entered num

Input(numbers base)

In case of an invalid input return to menu 1 again

Use function is\_the\_right\_base(num, numbers\_base) to detect if the number is indeed in the base user has entered

## #menu3

Prompt the user to enter a letter A, B, C or D representing the base of the wanted number

In case of invalid input

return to menu3 again

In case of A as an input

If(numbers\_base == wanted\_base)

Print(num) since no transformation happens in this case

else

transfer the number to decimal if it is not already using function convert\_to\_decimal(num, numbers\_base)

transfer the number to the wanted base using function convert\_to\_wanted\_base(num, wanted\_base)

print(num)

else if query == ‘B’

exit

else

return to menu1

function convert\_to\_decimal(num, base)

loop \*from end to start\*

transform the character to an integer

result += num \* (base \*\* (number of the digit – 1))

return result

function is\_the\_right\_base(N, base)

loop

if it’s not the case that 0 =< character <= base

return False

return True

function convert\_to\_wanted\_base(N, base):

N = integer(NONE)

string hex = "0123456789ABCDEF"

string Result = ""

while N != 0:

integer Reminder = N % base

Result = hex[Reminder] + Result

N = integer(N/base)

Return Result