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```
%%************************************************************%%
%**            Mami FOFANA  & Sanoussi FOFANA                **%
%**                  TP2 DCT transform                       **%
%**           Devoir N2 : Tronquage de deux images           *%%
%%************************************************************%%

clear all;
close all;
clc;
```

********** load Image **********

```
lena = imread('lena.jpg');
lena = double(lena);
lena_dct = dct2(lena);
figure();
imagesc(lena);
colormap(gray); title('Original lena');

baboon = imread('Baboon.jpg');
baboon = double(baboon);
baboon_dct = dct2(baboon);
figure(); imagesc(baboon);
colormap(gray); title('Original baboon');


%%************************************************************************
```


Original lena
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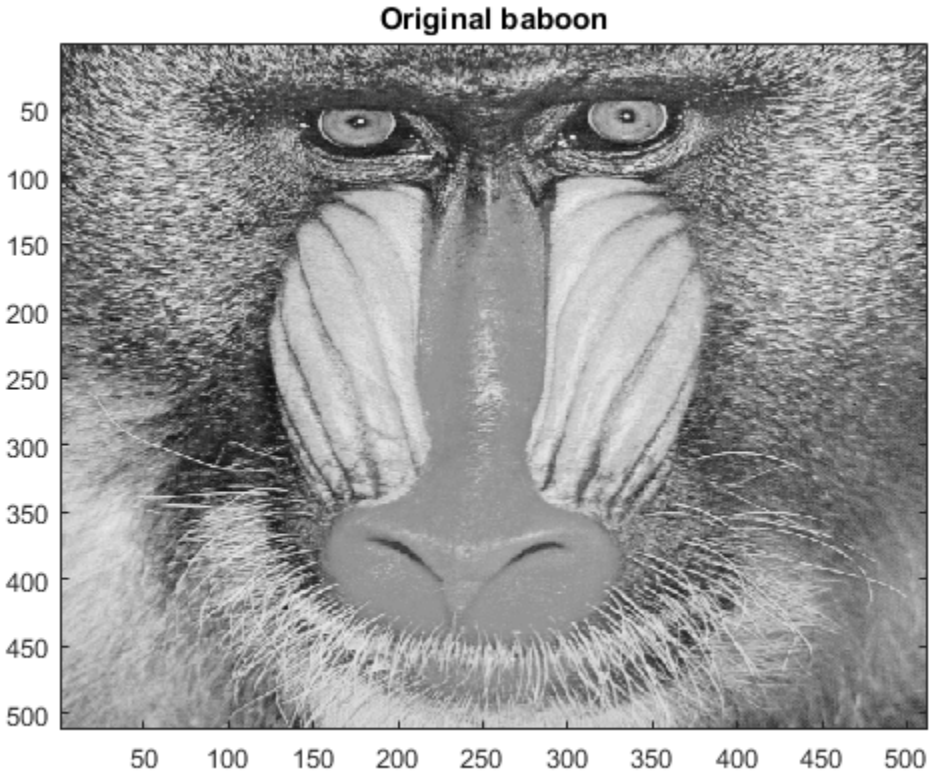
Original baboon
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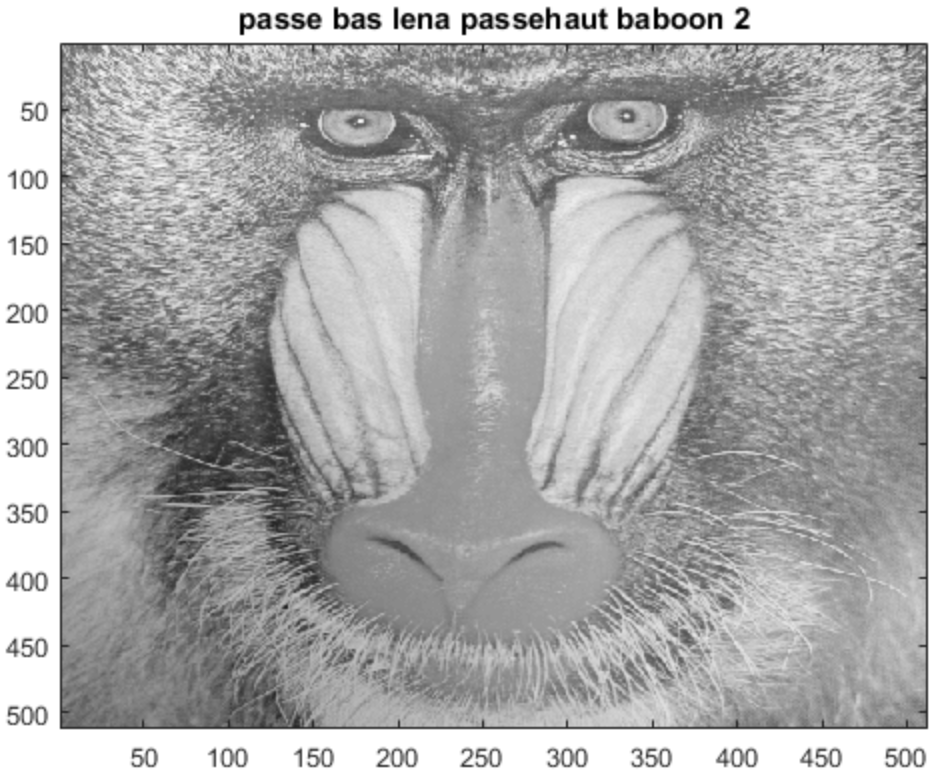
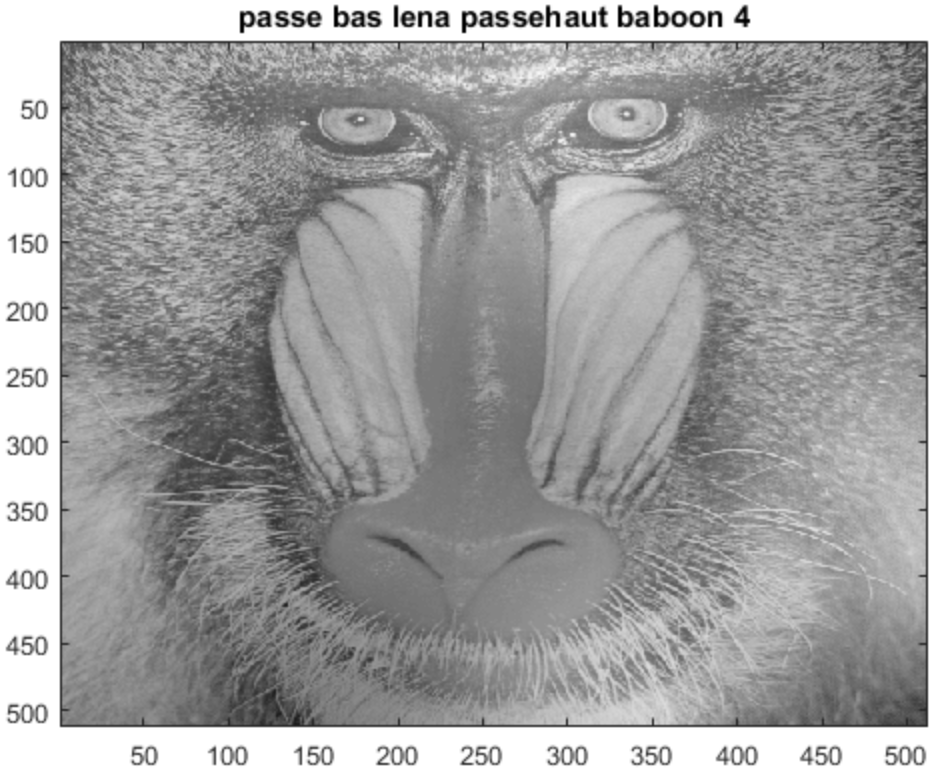
********** Tronquage passeBas-lena passe-Haut-baboon **********%%

```
%%********** k = 2, 4, 8, 16, 32, 64, 128, 256
 **********%%
%%
%*********************************************************************
%%%%
%pb : passe bas*
%ph : passe haut
pb_lena_ph_baboon_dct2 = troncIm(lena_dct,baboon_dct,2);
pb_lena_ph_baboon2 = idct2(pb_lena_ph_baboon_dct2);
figure();
imagesc(pb_lena_ph_baboon2);
colormap(gray); title('passe bas lena passehaut baboon 2');

pb_lena_ph_baboon_dct4 = troncIm(lena_dct,baboon_dct,4);
pb_lena_ph_baboon4 = idct2(pb_lena_ph_baboon_dct4);
figure();
imagesc(pb_lena_ph_baboon4);
colormap(gray);
title('passe bas lena passehaut baboon 4');


pb_lena_ph_baboon_dct8 = troncIm(lena_dct,baboon_dct,8);
pb_lena_ph_baboon8 = idct2(pb_lena_ph_baboon_dct8);
figure();
imagesc(pb_lena_ph_baboon8);
colormap(gray);
title('passe bas lena passehaut baboon 8');


pb_lena_ph_baboon_dct16 = troncIm(lena_dct,baboon_dct,16);
pb_lena_ph_baboon16 = idct2(pb_lena_ph_baboon_dct16);
figure();
imagesc(pb_lena_ph_baboon16);
colormap(gray);
title('passe bas lena passehaut baboon 16');



pb_lena_ph_baboon_dct32 = troncIm(lena_dct,baboon_dct,32);
pb_lena_ph_baboon32 = idct2(pb_lena_ph_baboon_dct32);
figure();
imagesc(pb_lena_ph_baboon32);
colormap(gray);
title('passe bas lena passehaut baboon 32');


pb_lena_ph_baboon_dct64 = troncIm(lena_dct,baboon_dct,64);
pb_lena_ph_baboon64 = idct2(pb_lena_ph_baboon_dct64);
figure();
```

```
imagesc(pb_lena_ph_baboon64);
colormap(gray);
title('passe bas lena passehaut baboon 64');


pb_lena_ph_baboon_dct128 = troncIm(lena_dct,baboon_dct,128);
pb_lena_ph_baboon128 = idct2(pb_lena_ph_baboon_dct128);
figure();
imagesc(pb_lena_ph_baboon128);
colormap(gray);
title('passe bas lena passehaut baboon 128');



pb_lena_ph_baboon_dct256 = troncIm(lena_dct,baboon_dct,256);
pb_lena_ph_baboon256 = idct2(pb_lena_ph_baboon_dct256);
figure();
imagesc(pb_lena_ph_baboon256);
colormap(gray);
title('passe bas lena passehaut baboon 256');
```




passe bas lena passehaut baboon 4
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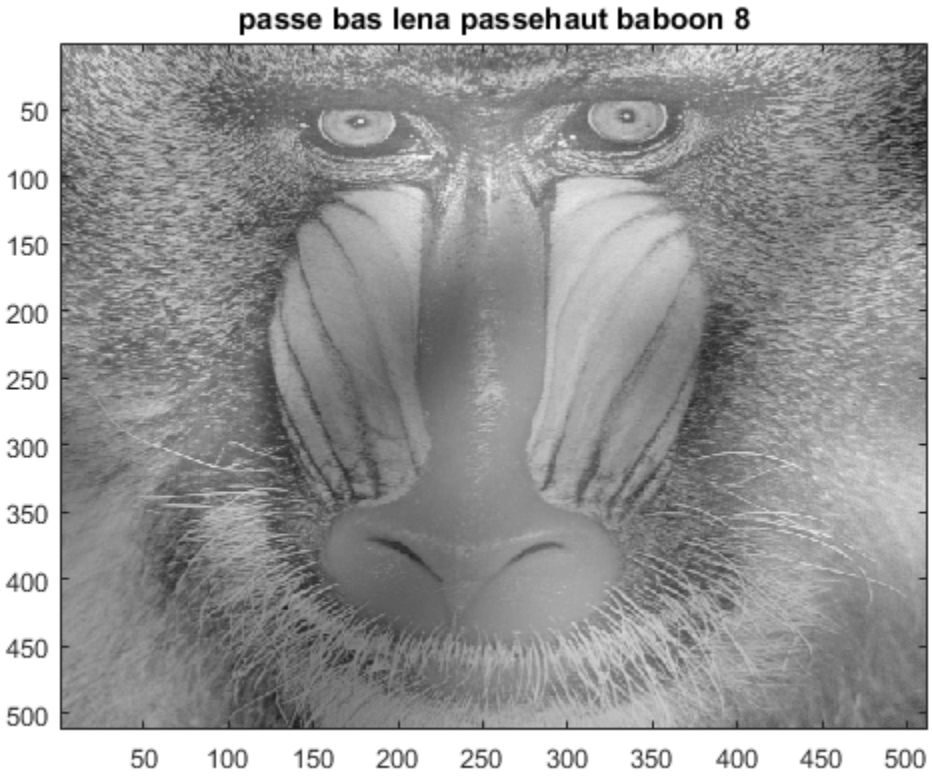
passe bas lena passehaut baboon 8
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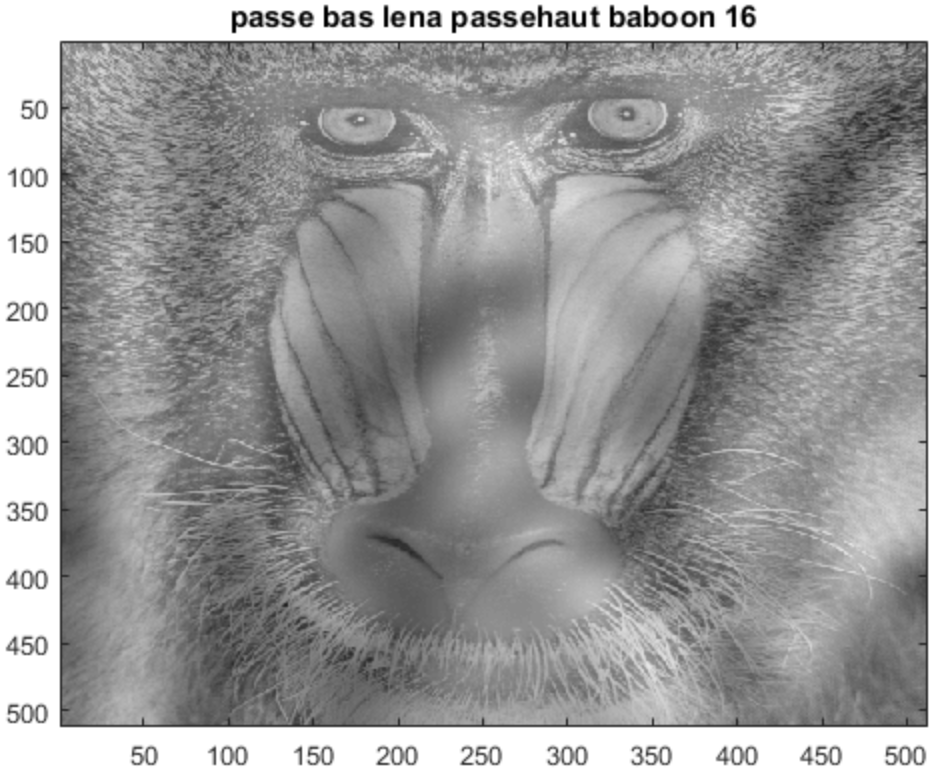
passe bas lena passehaut baboon 16
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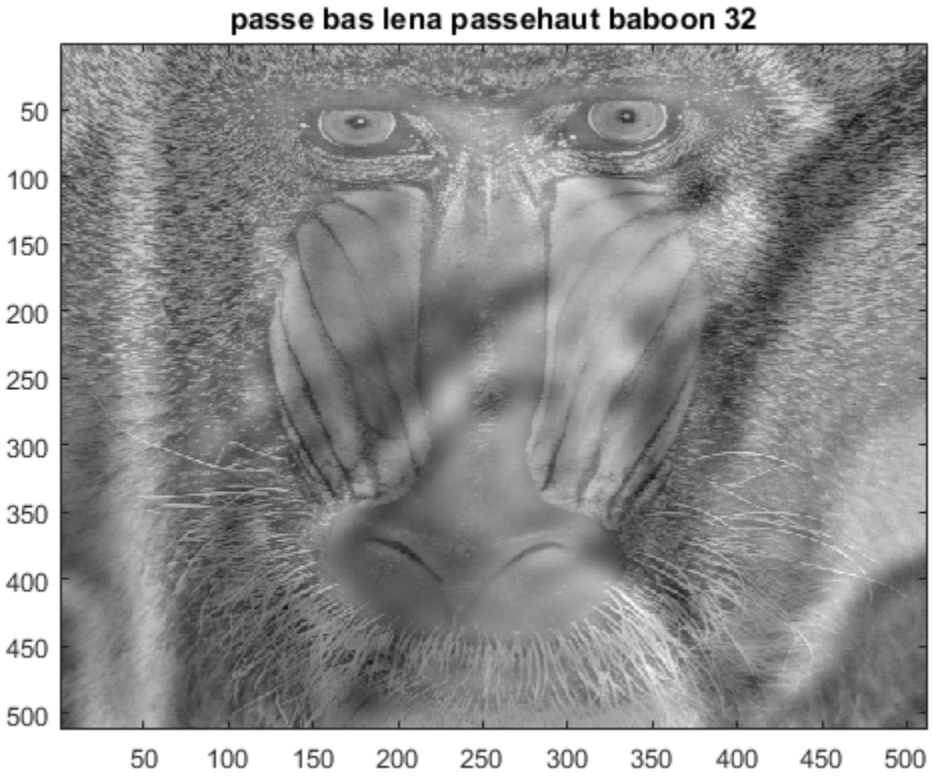
passe bas lena passehaut baboon 32
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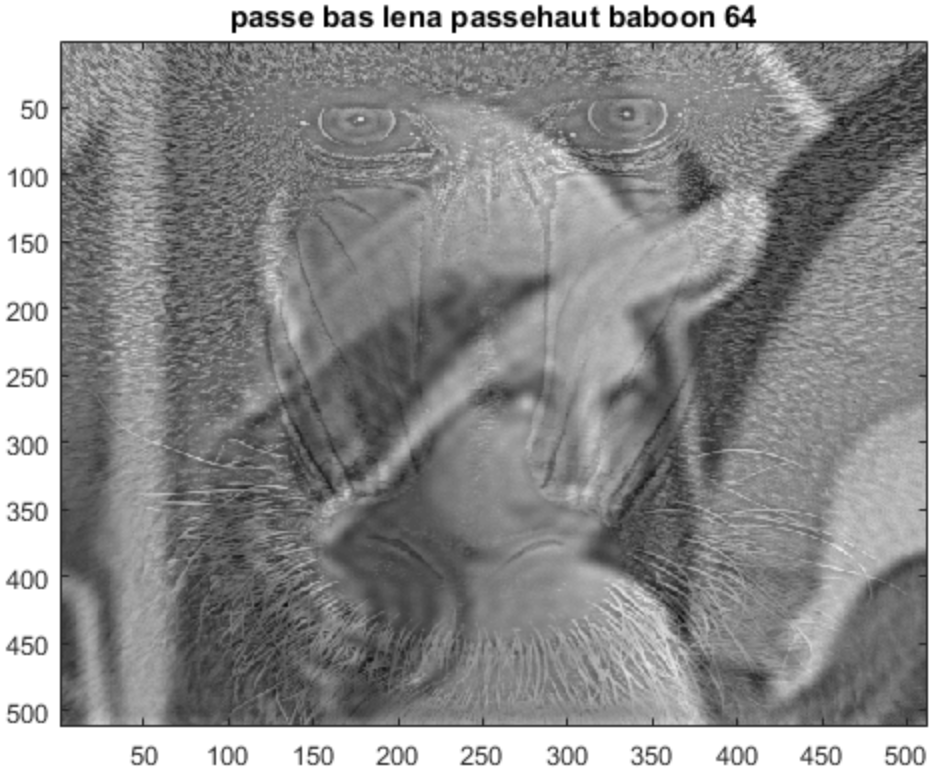
passe bas lena passehaut baboon 64
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passe bas lena passehaut baboon 128
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FOnction tronclm :

Cette fonction prend en parametre deux , puis alloue une variable suplementaitre à fin de transiter les image : soiet A, B les deux paramètre , on choisit C une variable tel que C = A ; B = C .

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