```
function iFour()

format longg

% ft --> true value
% fsb--> small to big approx (1:1:10000)
% fbs--> big to small approx (10000:-1:1)
ft = pi^4/90
fsb = single(0);
fbs = single(0);

for i = 1:1:10000
    fsb = fsb + 1/(i^4);
end

for n = 10000:-1:1
    fbs = fbs + 1/(n^4);
end

fsb
fbs

%Error calculations
fsbE = abs(ft-fsb)/ft * 100
fbsE = abs(ft-fbs)/ft * 100

end
```

```
ft =

          1.08232323371114


fsb =

  single

        1.082322


fbs =

  single

        1.082323


fsbE =

  single

    0.0001028385


fbsE =
```

```
single

  3.710632e-06
```

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