



**Ganpat
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-----PRACTICAL 02-----

▪ Relative Frequency Definition

❖ 1. Relational Operator (without if else)

✓ Source Code:

```
pHead = 0;
pTail = 0;

% number of trials
n = input("Enter no of trials:");

for i = 1:n
    r = rand();

    pHead = pHead + (r < 0.5);
    pTail = pTail + (r >= 0.5);
endfor

probHead = pHead / n;
probTail = pTail / n;

disp('Probability of head: ');
disp(probHead);

disp('Probability of tail: ');
disp(probTail);
```

✓ **Output Screenshot:**

```
>> Enter no of trials:7
Probability of head:
0.4286
Probability of tail:
0.5714
```

❖ **2. find and length function**

✓ **Source Code:**

```
clc;
clear all;
n = input("Enter number of trials : ");
a=randi([0,1],1,n)
for i=1:length(a)
    if (a(i)==0)
        a(i)= 'T';
    else
        a(i)='H';
    endif
endfor
nh=length(find(a=="H"));
nt=length(find(a=="T"));
printf("P(H) = %d\n",nh/n);
printf("P(T) = %d\n",nt/n);
```

✓ **Output Screenshot:**

```
Enter number of trials : 12
a =

    0    1    0    0    0    1    1    0    0    0    1    1

P(H) = 0.416667
P(T) = 0.583333
```