**Program in C to perform the Power Set Operation on a set.**

#include <stdio.h>

#include <math.h>

void printPowerSet(char \*set, int set\_size)

{

/\*set\_size of power set of a set with set\_size

n is (2\*\*n -1)\*/

unsigned int pow\_set\_size = pow(2, set\_size);

int counter, j;

/\*Run from counter 000..0 to 111..1\*/

for(counter = 0; counter < pow\_set\_size; counter++)

{

for(j = 0; j < set\_size; j++)

{

/\* Check if jth bit in the counter is set

If set then print jth element from set \*/

if(counter & (1<<j))

printf("%c", set[j]);

}

printf("\n");

}

}

/\*Driver program to test printPowerSet\*/

int main()

{

char set[] = {'a','b','c'};

printPowerSet(set, 3);

return 0;

}