2. Write a C Program to generate first n Ugly Numbers Write a C Program to generate first n Ugly Numbers

# include<stdio.h>

# include<stdlib.h>

int maxDivide(int a, int b)

{

while (a%b == 0)

a = a/b;

return a;

}

int isUgly(int no)

{

no = maxDivide(no, 2);

no = maxDivide(no, 3);

no = maxDivide(no, 5);

return (no == 1)? 1 : 0;

}

int getNthUglyNo(int n)

{

int i = 1;

int count = 1;

while (n > count)

{

i++;

if (isUgly(i))

count++;

}

return i;

}

int main()

{

unsigned no = getNthUglyNo(15);

printf("15th ugly no. is %d ", no);

getchar();

return 0;

}

OUTPUT:

