1)

#include<stdio.h>

#define CONDITION(i)\

printf("preprocessor works\n");

int main()

{

CONDITION(0);

return 0;

}

// preprocessor will searches for the Macro name CONDITION and substitute the msg preprocessor work

/\* output

preprocessor works

\*/

2)#include<stdio.h>

# define loop while(TRUE)

int main()

{

loop ;

printf("preprocessor-aptitude");

return 0;

}

// true is used with boolean eq so it is showing TRUE undefined

//if we write while(1) then output will blank becoz after loop semicolon is there

//if we remove semicolon we get infinite loop

3)#include<stdio.h>

# define x --5

int main()

{

int x;

printf("%d",x);

return 0;

}

// error we cant use inc/dec operator with constant

4)#include<stdio.h>

#define sqr(x) ++x \* ++x

int main()

{

int a = 3, z;

z = ++a \* ++a; // ++a -> 4 ++a=4+1=5 5\*5=25

a -= 3;// a=a-3 -> 5-3=2

printf("%d %d", sqr(a), z); // ++a \* ++a -> 4\*4=16

return 0;

}

//output 16 25

5)#include<stdio.h>

#define x 1+2

int main()

{

int i;

i = x \* x \* x;// 1+2\*1+2\*1+2

printf("%d",i);

}

//output 7

6)#include<stdio.h>

#define a =

int main()

{

int num a 6;// num=6

printf("%d",num);

return 0;

}

// output 6

7)#include<stdio.h>

#define fun(x,y) x\*y

int main()

{

int x = 2, y = 1;

printf("%d",fun(x + 2, y - 1));//2+2\*1-1 ->2+2-1 ->3

return 0;

}

//output 3

8)#include<stdio.h>

int main()

{

char DATE[15] = "Current Date";

printf("%s\n", \_\_DATE\_\_ );// predefined macro

return 0;

}

//output Aug 10 2021

9)#include<stdio.h>

int main()

{

char TIME[15] = "Current Time";

printf("%s\n",\_\_TIME\_\_);

return 0;

}

// output it will give current time of execution

10)what will be the output of the c program?

int main()

{

Printf(“Line:%d\n”,\_LINE\_);

return 0;

}

//// output it will give current line number of execution

11)#include<stdio.h>

#define preprocessor\_works(x, y) \

printf(#x " and " #y " are great!\n")

int main(void) {

preprocessor\_works(you, me);

return 0;

}

// output :you and me are great!

12)#include<stdio.h>

# define puts "%s C preprocessor"

int main()

{

printf(puts, puts);

return 0;

}

// output

//%s C preprocessor C preprocessor

13)#include<stdio.h>

#define preprocessor(n) printf ("macro" #n " = %d", macro##n)

int main(void) {

int macro25 = 47;

preprocessor(25);// printf("macro25=%d",macro25)

return 0;

}

/\* output

macro25 = 47\*/

14)#include<stdio.h>

#include<string.h>

#define MACRO(num) ++num

int main()

{

char \*ptr = "preprocessor";

int num =strlen(ptr);//12

printf("%s ", MACRO(ptr));

printf("%d", MACRO(num));

return 0;

}

/\* output

reprocessor 13

\*/

15)#include<stdio.h>

#define clrscr() 50

int main()

{

clrscr();

printf("%d\n",clrscr());

return 0;

}

// output is 50

16)#include<stdio.h>

#define clrscr() 50

int main()

{

clrscr();

printf("%d\n",clrscr());

return 0;

}

// output is 50

17)#include<stdio.h>

#define int char

main()

{

int i=5;

printf ("sizeof (i) =%d", sizeof (i));// we have defined int as char

}

//sizeof (i) =1