

Q. Write a program to perform constant propagation.

Constant Propagation is the process of substituting the values of known constants in expression at compile time.

Consider following pseudocode:

```
int x=14;
int y = 7-x/2;
return y*(28/x+2);
```

after applying
constant
propagation

```
int x=14;
int y = 7-14/2;
return y*(28/14+2);
```

further

```
int x=14;
int y = 0;
return (0);
```

→ C code for above example:

```
#include <stdio.h>
int main()
{
    int x=14;
    int y = 7-14/2;
    return (y*(28/14+2));
}
```