

[A] Write the output of the programs:~

1.

```
#include<stdio.h>

void display();

int main()
{
    printf("Only stupids use C?\n");
    display();
    return 0;
}

void display()
{
    printf("Fools too use c\n");
    main();
}
```

Output:

Only stupids use C?
Fools too use C..... (infinite times)

2.

```
#include<stdio.h>
int main()
{
    printf("C to it that C survives\n");
    main();
    return 0;
}
```

Output:

[illegible]

3.

```
#include<stdio.h>
int check(int);
int main()
{
    int i = 45, c;
    c = check(i);
    printf("%d\n", c);
    return 0;
}
int check(int ch)
{
    if(ch >= 45)
        return (100);
    else
        return (10*10);
}
```

Output:

```
100
```

4.

```
#include<stdio.h>
int check(int);
int main()
{
    int i = 45, c;
    c = check(i*1000);
    printf("%d\n", c);
    return 0;
}
int check(int ch)
{
    if(ch >= 40000)
        return (ch/10);
    else
        return (10);
}
```

Output: Error (function multiply is not defined)

[B] Point out the errors:~

1.

```
#include<stdio.h>
int addmult(int, int);
int main()
{
    int i = 3, j = 4, k, l ;
    k = addmult ( i, j ) ;
    l = addmult ( i, j ) ;
    printf ( "\n%d %d", k, l ) ;
    return 0;
}
int addmult ( int ii, int jj )
{
    int kk, ll ;
    kk = ii + jj ;
    ll = ii * jj ;
    return ( kk, ll ) ;
}
```

Errors:

1. A semicolon missing in the prototype declaration of the function.
2. A function cannot return more than one value.

2.

```
#include<stdio.h>
void message();
int main()
{
    int a ;
    a = message( ) ;
    return 0;
}
void message( )
{
    printf ( "\nViruses are written in C" ) ;
    return;
}
```

Errors: Message function has return type void, so it cannot be assigned to any variable.(line5)

3.

```
#include<stdio.h>
int main()
{
    float a = 15.5;
    char ch = 'C';
    printit ( a, ch );
    return 0;
}
printit ( a, ch )
{
    printf ( "\n%f %c", a, ch ) ;
}
```

Errors:~

1. Function definition arguments should have a datatype.(line7)
2. The function is not defined before calling, or there should be a prototype declaration of the function.(line 10)[a,ch should be declared as 'float' and 'char']

4.

```
#include<stdio.h>
void message();
int main()
{
    message();
    message();
    return 0;
}
message( );
{
    printf ( "\nPraiseworthy and C worthy are synonyms" ) ;
}
```

Errors:~ invalid use of semicolon after function name in the function definition.(line 10)

5.

```
#include<stdio.h>
int main()
{
    let_us_c( )
    {
        printf ( "\nC is a Simple minded language !" ) ;
        printf ( "\nOthers are of course no match !" ) ;
    }
    return 0;
}
```

Error: Function definition is invalid in other functions. { one function cannot be defined inside other functions}

warning: implicit declaration of function 'let_us_c'

6.

```
#include<stdio.h>
void message();
int main()
{
    message(message());
    return 0;
}
void message()
{
    printf("It's a small world after all...\n");
}
```

Error: void is sent in the message as an argument, which is invalid.

[C] Answer the following:~

1.

```
sqr(a);
int a;{
    return (a*a);
}
```

Error: No! Invalid use of semicolon after the function name.

1. False
2. False
3. True
4. False
5. True
6. True
7. True
8. false
9. True
10. True

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