

PRACTICAL NO;-3

AIM;-USE OF VARIOUS DAT TYPE ALONG WITH FORMAT SPECIFIER AND SWAPING OF TWO NUMBERS.

- **WAP TO FIND SUM OF TWO INTEGERS.**

SOLUTION-#INCLUDE<stdio.h>

int main (){

int a=5;

int b=6;

intc=a+b;

printf("dev pathak\n");

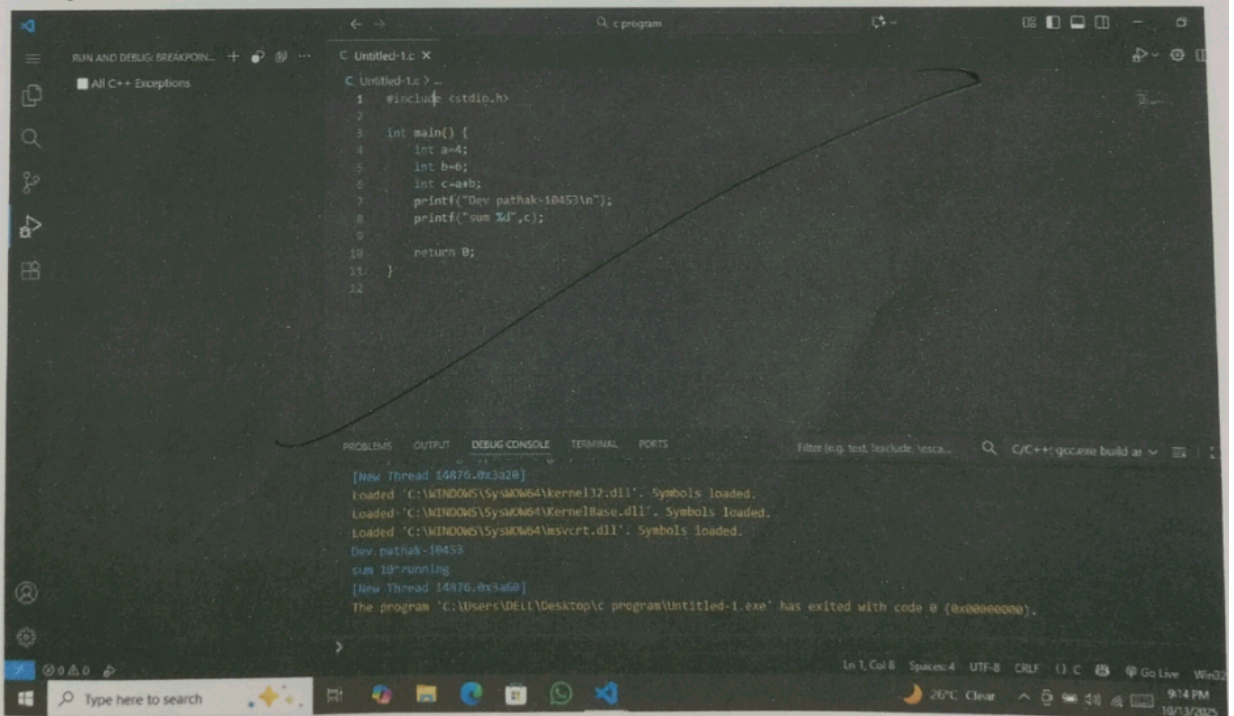
printf("sum of two numbers;%d",c);

return0;

}

Here we can identify that %d is used in printing the integer value which is format specifier of integer.

Output;--



The screenshot displays a C++ development environment. The top pane shows the source code for a program named 'Untitled-1.c'. The code includes the standard input/output header, defines a main function, declares two integer variables 'a' and 'b' with values 5 and 6 respectively, calculates their sum into variable 'c', and prints the name 'dev pathak' and the sum using printf. The bottom pane shows the output of the program, which includes system messages about loading DLLs and the execution of the program, followed by the output 'dev pathak-10453' and 'sum 10^running'. The program is shown to have exited successfully with code 0.

```
1 #include <stdio.h>
2
3 int main() {
4     int a=5;
5     int b=6;
6     int c=a+b;
7     printf("dev pathak\n");
8     printf("sum %d",c);
9
10    return 0;
11 }
```

[New Thread 14876.0x3a2e]
loaded 'C:\WINDOWS\System32\kernel32.dll'. Symbols loaded.
loaded 'C:\WINDOWS\System32\KernelBase.dll'. Symbols loaded.
loaded 'C:\WINDOWS\System32\user32.dll'. Symbols loaded.
dev pathak-10453
sum 10^running
[New Thread 14876.0x3a60]
The program 'C:\Users\DELL\Desktop\c program\Untitled-1.exe' has exited with code 0 (0x00000000).

❖ WAP TWO FIND DIFFERENCE OF TWO DECIMAL NUMBERS.

SOLUTION:-

```
#include<stdio.h>
```

```
Int main(){
```

```
Float a=9.8;
```

```
Float b=8.6;
```

```
Float c=a-b;
```

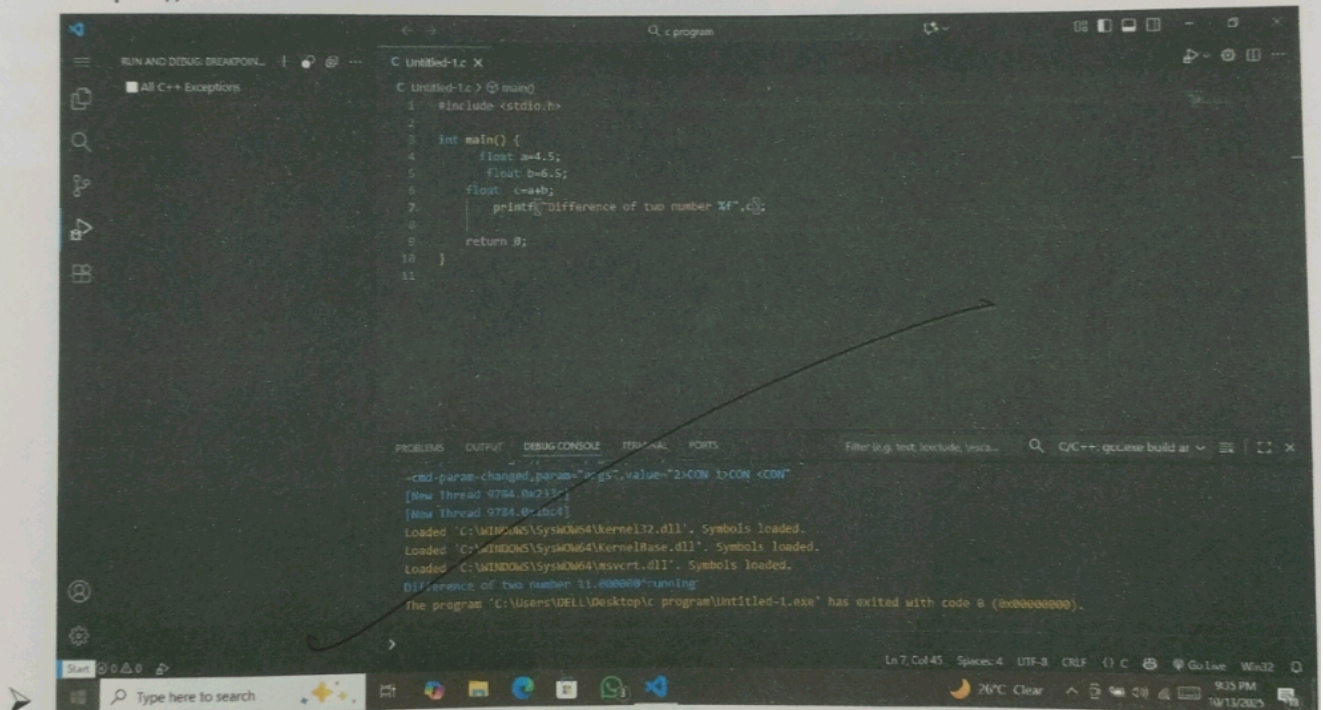
```
Printf("DIFFERENCE OPF TWO NUMBERS %f"C);
```

```
return0;
```

```
}
```

Here we can identify that %f is used in printing the float value which is format specifier of float.

➤ Output:-



The screenshot shows a C++ IDE with a source code editor and a debug console. The source code is as follows:

```
1 #include <stdio.h>
2
3 int main() {
4     float a=4.5;
5     float b=6.5;
6     float c=a-b;
7     printf("Difference of two number %f",c);
8
9     return 0;
10 }
```

The debug console shows the following output:

```
-cmd-param-changed,param="args",value="2>CON 1>CON <CON"
[New Thread 9784.Bx233]
[New Thread 9784.0x1dc4]
Loaded 'C:\WINDOWS\System32\Kernel32.dll'. Symbols loaded.
Loaded 'C:\WINDOWS\System32\KernelBase.dll'. Symbols loaded.
Loaded 'C:\WINDOWS\System32\user32.dll'. Symbols loaded.
Difference of two number 11.000000
The program 'C:\Users\DELL\Desktop\c program\Untitled-1.exe' has exited with code 0 (0x00000000).
```


❖ Wap to convert ascii code to integer and forward 3 characters to the input

Solution # include<stdio.h>

```
Int main(){
```

```
Chara='A';
```

```
Printf("character is %c\n",a);
```

```
Printf("ASCII Code of character is%d\n",a);
```

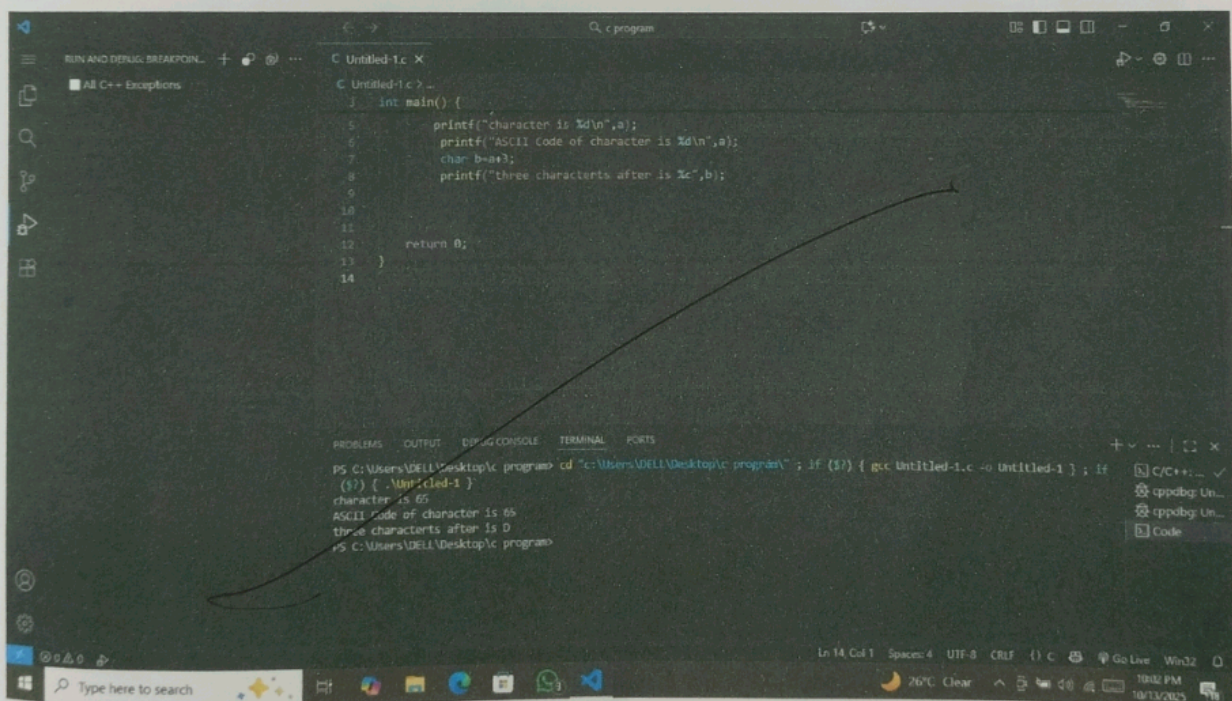
```
Char b=a+3;
```

```
Printf("THREE CHARACTER AFTER IS %c",b);
```

```
Return0;
```

❖ Here we can identify that %c is used in printing the character value which is format specifier of character

❖ Output;-



The screenshot shows a C++ IDE with a code editor and a terminal window. The code in the editor is as follows:

```
1 int main() {  
2     printf("character is %d\n",a);  
3     printf("ASCII Code of character is %d\n",a);  
4     char b=a+3;  
5     printf("three characters after is %c",b);  
6  
7     return 0;  
8 }
```

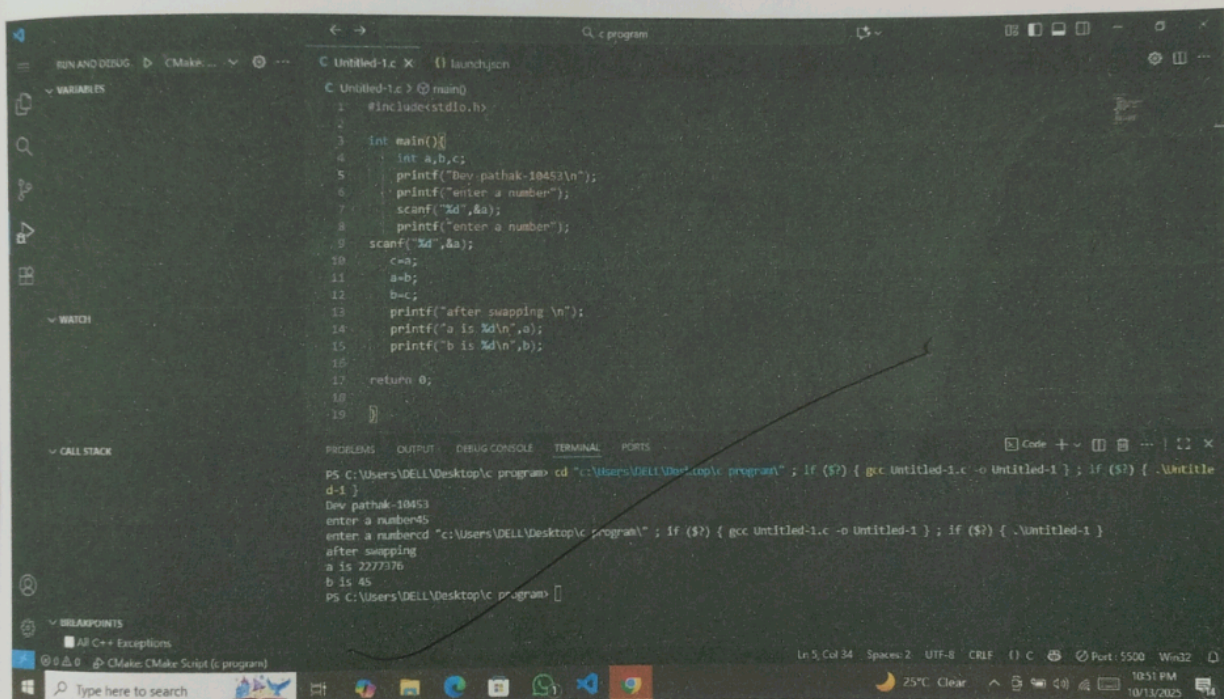
The terminal window shows the output of the program:

```
PS C:\Users\DELL\Desktop\c program> cd "C:\Users\DELL\Desktop\c program" ; if ($?) { gcc Untitled-1.c -o Untitled-1 } ; if ($?) { .\Untitled-1 }  
character is 65  
ASCII Code of character is 65  
three characters after is D  
PS C:\Users\DELL\Desktop\c program>
```

The output matches the expected result: the character 'A' (ASCII 65) is printed, its ASCII code (65) is printed, and the character 'D' (ASCII 68) is printed, which is 3 characters forward from 'A'.

❖ WAP TO INPUT TWO NUMBERS AND SWAP EACH OTHER

➤ SOLUTION:-



The screenshot shows a C++ IDE with a code editor, a terminal, and a debug console. The code in the editor is as follows:

```
1 #include<stdio.h>
2
3 int main(){
4     int a,b,c;
5     printf("Dev pathak-10453\n");
6     printf("enter a number");
7     scanf("%d",&a);
8     printf("enter a number");
9     scanf("%d",&a);
10    c=a;
11    a=b;
12    b=c;
13    printf("after swapping \n");
14    printf("a is %d\n",a);
15    printf("b is %d\n",b);
16
17    return 0;
18 }
```

The terminal output shows the program's execution:

```
PS C:\Users\DELL\Desktop\c program> cd "c:\Users\DELL\Desktop\c program"; if ($?) { gcc Untitled-1.c -o Untitled-1 }; if ($?) { .\Untitled-1 }
Dev pathak-10453
enter a number5
enter a number6
after swapping
a is 2277376
b is 45
PS C:\Users\DELL\Desktop\c program>
```

The debug console shows the call stack and variables.

