# Assignment - 4 - C Language

(01) Write a C Program to Print "Hello students" on Screen.

```
#include<stdio.h>
int main()
{ Printf("Hello Students");
Return 0;
}
```

Output

Hello Students

(02) Write a C Program to Print Hello on the first line and Students in the Second line.

```
#include<stdio.h>
int main()
{ Printf("Hello \n Students);
Return 0;
}
```

Output

Hello
Students.

(03) Write a C Program to Print "MySirG" on the Screen.

```
#include<stdio.h>
int main()
{ Printf("MySirG");
Return 0;
}
```

Output

MySirG.

(04) Write a C Program to Print "Teacher's Day" on the Screen

```
#include<stdio.h>
int main()
{ Printf("Teacher's Day");
Return 0;
}
```

output

Teacher's Day.

(05) Write a C Program to Print \n on the Screen.

```
#include<stdio.h>
int main()
{ Printf("\\n");
Return 0;
}
```

Output

\n

(06) Write a C Program to Print %d on the Screen.

```
#include<stdio.h>
int main()
{ Printf("%%d");
Return 0;
}
```

output

%d

(07) Write a C Program Containing declaration of three variables (of int, char and float), also assign some values to them and Print values of all three variables using Single Printf()

```
# include<stdio.h>
  int main()
{ int a=10;
  char b='A';
  float c=3.14;
  Printf("%d/n %c/n %f/n", a, b, c);
  Return 0;
}
```

Output

```
10
A
3.14
```

(08) Explore following format Specifiers on Internet — %i, %g, %lf

Ans — %i — Specifier the type as integer.

%g — The general format specifiers Converts a number to the more Compact of either fixed-Point or Scientific notation.

%lf — for Double type.

(09) Write a C Program to Print Character Stored in a char variable also Print its ASCII Code.

```
# include <stdio.h>
  int main()
{ char a='A'
  Printf("character : %c/n ASCII Code : %d/n", a, a);
  Return 0;
}
```

Output

```
Character : A
ASCII Code : 65
```

(10) How to Convert a Decimal number into a Binary number and Vice-Versa

Ans

- Decimal to Binary — Divide by 2 & arrange all Remainder from down to up.

  Eg- $(100)_{10}$ — $(\ )_2$

  2|100|0
  2|50|0
  2|25|1
  2|12|0
  2|6|0
  2|3|1

  $(1100100)_2$ A

- Binary to Decimal

  $(1100100)_2$ — $(\ )_{10}$ $= 0\times2^6 + 0\times2^5 + 0\times2^4 + 0\times2^3 + 1\times2^2 + 0\times2^1 + 0\times2^0$
  $= 64 + 32 + 0 + 0 + 4 + 0 + 0 = (100)_{10}$ A