

ASSIGNMENT 4

1. Write a C program to print Hello Students on the screen.

Ans- #include<stdio.h>

```
int main() {  
    printf("Hello Students"); }
```

2. Write a C Program to print Hello on the first line and Students in the second line.

Ans- #include<stdio.h>

```
int main() {  
    printf("Hello\nStudents"); }
```

3. Write a C program to print "MySirG" on the screen

Ans- #include<stdio.h>

```
int main() {  
    printf("MySirG"); }
```

4. Write a C program to print "Teacher's Day" on the screen

Ans- #include<stdio.h>

```
int main() {  
    printf("Teacher's Day"); }
```

5. Write a C program to print n on the screen

Ans- #include<stdio.h>

```
int main(){  
    printf("\n"); }
```

6. Write a C program to print %d on the screen

Ans- #include<stdio.h>

```
int main() {  
    printf("%%d"); }
```

7. Write a C program containing declaration of three variables (of type int, char and float), also assign some values to them and print values of all three variables using single printf().

Ans- #include<stdio.h>

```
int main(){  
  
int x; char y; float z;  
  
x=3; y= "R"; z=0.78;  
  
printf("integer value = %d\ncharacter value = %c\nfloat value = %f" x,y,z); }
```

8. Explore following format specifiers on internet - %i, %g, %lf

Ans- The format specifier %i the type of variable as an integer value.

The format specifier %g the type of variable as decimal floating-point value.

The format specifier %lf the type of variable as double value.

9. Write a C program to print character stored in a char variable, also print its ASCII code.

Ans- #include<stdio.h>

```
int main() {  
  
char word='k';  
  
printf("character stored in word variable is %c \nASCII code =%i",word,word); }
```

10. How to convert a Decimal number into a Binary number and vice versa.

Ans- Decimal to Binary: Taking a decimal 555, dividing it by 2 we get remainder as 1 and quotient as 277. Repeat the process till q = 1.

r = 1, q = 138 ; r = 0, q = 69 ; r = 1, q = 34 ; r = 0, q = 17 ; r = 1, q = 8 ; r = 0, q = 4 ; r = 0, q = 2 ;

r = 0, q = 1

The binary is bottom to top all remainders (first include last quotient 1) - 1 0 0 0 1 0 1 0 1 1

Binary to decimal: Taking a binary 11101001, Start from 1 and double that and keep on writing 1-by-1 digit in front of those nos.

1 = 1, 2 = 0, 4 = 0, 8 = 1, 16 = 0, 32 = 1, 64 = 1, 128 = 1

Add nos. who has 1 in front 128 + 64 + 32 + 8 + 1 = 233