ASSIGNMENT - 1

ANS 1-

```c
#include<stdio.h>
#include<conio.h>
int main(){
    float price, rate, total;
    scanf("%f",&price);
    scanf("%f",&rate);
    total= price + (price*(rate/100));
    printf("%.2f",total);
    return 0;
}
```

ANS 2-

```c
#include<stdio.h>
#include<conio.h>
#include<math.h>
int main(){
    float hw, wh, ww, oth, otp, rgw;     // hw=hour wages , wh= work hour , ww=
weekly wages
    scanf("%f",&hw);                 // oth= over time hour, otp=over time
payment
    scanf("%f",&wh);                  // rg=regular wages
    if(wh<=30)
    {
        ww=hw*wh;
    }
    else
    {
        oth=wh-30;
        otp=oth*ww*2;
        rgw=hw*30;
        ww=rgw+otp;
    }
    printf("%.2f",ww);
    return 0;
}
```

ANS 3-

```c
#include<stdio.h>
#include<conio.h>
int main(){
    float a=50.0, m=35.0, p=10.0, t=15.0, total, ret;
```

```
    total=(2.0*a)+(1.5*m)+(2.5*p)+(1.0*t);
    ret=(500-total);
    printf("%.2f",ret);
    return 0;
}

ANS 4-
#include <stdio.h>
int main() {
    char name[10];
    int date,mon,yr;
    long int mobile;
    printf("name:");
    gets(name);

    printf("date:");
    scanf("%d",&date);
    printf("month:");
    scanf("%d",&mon);
    printf("year:");
    scanf("%d",&yr);

    printf("mob_no:");
    scanf("%ld",&mobile);

    printf("name : %s \nYour DOB : %d%d%d \nMob_no :
%ld",name,date,mon,yr,mobile);

    return 0;
}

ANS 5-
#include<stdio.h>
#include<conio.h>
int main(){
    int i;
    char c[1];
    float f;
    scanf("%d",&i);
    fflush(stdin);
    scanf("%s",&c);
    scanf("%f",&f);
    printf("%d\n",i);
    printf("%s\n",c);
    printf("%.2f\n",f);
```

```
    return 0;
}

ANS 6-
#include<stdio.h>
#include<conio.h>
int main(){
    float cost=172.53;
    printf("The sales total is : $ %.2f",cost);
    return 0;
}

ANS 7-
#include<stdio.h>
#include<conio.h>
int main(){
    float people=3, apple=6.5;
    float total;
    total=people*apple;
    printf("%.2f",total);
    return 0;
}

ANS 8-
#include<stdio.h>
#include<conio.h>
int main(){
    int n;
    scanf("%d",&n);
    printf("%.2e",n);
    return 0;
}

ANS 9-
#include<stdio.h>
#include<conio.h>
int main(){
    long int mobile;
    scanf("%ld",&mobile);
    printf("%ld",mobile);
    return 0;
}

ANS 10-
#include<stdio.h>
```

```c
#include<conio.h>
int main(){
    float p=30000,f,s,t;
    f=(20/100);
    s=(30/100);
    t=(p+(p*(1+f)*(1+s)));
    printf("%.2f",t);
    return 0;
}
```

ANS 11-

```c
#include<stdio.h>
#include<conio.h>
int main(){
    char c;
    scanf("%c",&c);
    printf("%d",c);
    return 0;
}
```

ANS 12-

```c
#include<stdio.h>
#include<conio.h>
int main(){
    float bp,total;
    scanf("%f",&bp);
    float HRA=(.15*bp);
    float TA=(.20*bp);
    total=bp+HRA+TA;
    printf("%f",total);
    return 0;
}
```

ANS 13-

```c
#include<stdio.h>
#include<conio.h>
#include<math.h>
int main(){
    double xp, yp;
    double xq, yq;
    printf("Enter the coordinates(xp yp): ");
    scanf("%lf %lf", &xp, &yp);

    printf("Enter the coordinates(xq yq): ");
    scanf("%lf %lf", &xq, &yq);
```

```
    double slope = (yq - yp) / (xq - xp);
    double theta = atan(slope);
    double angleInDegrees = theta * (180.0 / M_PI);

    printf("Slope of the line: %.2lf\n", slope);
    printf("Angle of inclination: %.2lf\n", angleInDegrees);
    return 0;
}
```

ANS 14-

```
#include<stdio.h>
#include<conio.h>
int main(){
    int c1,c2,c3,c4,c5,g1,g2,g3,g4,g5;
    float SP;
    scanf("%d %d %d %d %d",&c1,&c2,&c3,&c4,&c5);
    scanf("%d %d %d %d %d",&g1,&g2,&g3,&g4,&g5);
    SP=((c1*g1)+(c2*g2)+(c3*g3)+(c4*g4)+(c5*g5));
    printf("%.2f",SP);
    return 0;
}
```

ANS 15-

```
#include<stdio.h>
#include<conio.h>
int main(){
    float wl, c, f;
    scanf("%f",&wl);
    scanf("%f",&c);
    f=(c/wl);
    printf("%.2f",f);
    return 0;
}
```

ANS 16-

```
#include<stdio.h>
#include<conio.h>
#include<math.h>
int main(){
    float u=30, a=5, s=70, p,v;
    p=(pow(u,2)+(2*a*s));
    v=pow(p,0.5);
    printf("%f",v);
    return 0;
```

```
}

ANS 17-
#include<stdio.h>
#include<conio.h>
#include<math.h>
int main(){
    float u=0, a=4, t=3, v, s,r;
    v=(u+(a*t));
    r=(0.5*a*pow(t,2));
    s=((u*t) + r);
    printf("%.2f\n",v);
    printf("%.2f",s);
    return 0;
}

ANS 18-
#include<stdio.h>
#include<conio.h>
int main(){
    long int rn, r;
    int sum=0, a, b, c, d;
    scanf("%d",&rn);
    a=rn%10;
    rn=rn/10;
    b=rn%10;
    rn=rn/10;
    c=rn%10;
    rn=rn/10;
    d=rn%10;
    sum=a+b+c+d;
    printf("%d",sum);
    return 0;
}

ANS 19-
#include<stdio.h>
#include<conio.h>
int main(){
    float h, w, f, p;
    scanf("%f",&h);
    scanf("%f",&w);
    f=(h*0.393701);
    p=(w*2.20462);
    printf("%.2f\n",f);
```

```
    printf("%.2f",p);
    return 0;
}

ANS 20-
#include<stdio.h>
#include<conio.h>
int main(){
    char option;
    int sum=0;
    float product=1;
    return 0;
}

ANS 21-
#include<stdio.h>
#include<conio.h>
int main(){
    int i1, i2, i3, i4, i5, i6, i7, i8, i9;
    scanf("%d %d %d %d %d %d %d %d %d",&i1,&i2,&i3,&i4,&i5,&i6,&i7,&i8,&i9);
    printf("%d,%d,%d\n%d,%d,%d\n%d,%d,%d",i1,i2,i3,i4,i5,i6,i7,i8,i9);
    return 0;
}

ANS 22-
Header files in C programming are files that
contain declarations of functions, variables, and
other constructs that are defined in source code
files.
USES:
1. reduce risk of error.
2. provide declaration of variable.
3. code reuseability.

ANS 23-
#include<stdio.h>
int main()
{   int num=070;
printf("%d\t%o\t%x",num,num,num);
}
ANS- 56     70     38

ANS 24-
#include <stdio.h>
int main()
```

```
{
int x = printf("GLA UNIVERSITY");
printf("%d", x);
}
ANS- GLA UNIVERSITY14

ANS 25-
List any four library functions.
ANS- Library function are also in built function
are located in c language. These are located in
some common location. They are generally to obtain
predefine functio.
example-
1. stdio.h
2. math.h
3. time.h
4. conio.h

ANS 26-
#include <stdio.h>
void main()
{
    int x = printf("C is placement oriented Language")-printf(“Hi”);
    printf("%d %o %x", x,x,x);
}
ANS- ERROR as 'hi' was not declared in this scope.

ANS 27-
OUTPUT- 2
IT WILL RETURN THE COUNT OF NUMBER i.e. 2.

ANS 28-
OUTPUT-
C % FOR % PLACEMENT

ANS 29-
#include<stdio.h>
#include<conio.h>
int main(){
    float m, t=4, s;
    scanf("%f",&m);
    s=m*t;
    printf("%.2f",s);
    return 0;
}
```

ANS 30-

```c
#include<stdio.h>
#include<conio.h>
int main(){
    float satyam=50, suman=70, shyam=80, average;
    average= ((satyam+suman+shyam)/3);
    printf("%.2f",average);
    return 0;
}
```

ANS 31-

```c
#include<stdio.h>
#include<conio.h>
int main(){
    int saurav, sajal, c;
    scanf("%d",&saurav);
    scanf("%d",&sajal);
    printf("incorrect saurav: %d and sajal: %d\n",saurav,sajal);
    c=saurav;
    saurav=sajal;
    sajal=c;
    printf("correct saurav: %d and sajal: %d",saurav,sajal);
    return 0;
}
```

ANS 32-

```c
#include<stdio.h>
#include<conio.h>
int main(){
    float s=4, t=3, d;
    d= (s*(18/5))*(t*60);
    printf("%.2f",d);
    return 0;
}
```

ANS 33-

Yes, its perfectly ok to use two or more escape sequences in a single line of program code.

ANS 34-

Comments are the great way to put some remarke or description in a program . It can be of single line or multiple line.

```
// - for single line
/*..*/- for multiple line.
```

ANS 35 -
& is not written before number.

ANS 36 -
OUTPUT-
NO

ANS 37 -
Invalid variable names are gross-salary INTEREST, salary of emp
and avg.

ANS 38-
```c
#include<stdio.h>
int main(){
    float wph=25, wf=175, t;
    t=wf/wph;
    printf("%.2fhr",t);
    return 0;
}
```

ANS 39-
```c
#include<stdio.h>
#include<conio.h>
int main(){
    float y=0.75, x;
    x=((1-y)/0.2);
    printf("%.2fhr",x);
    return 0;
}
```

ANS 40-
(a) compiler

ANS 41-
(c) %o

ANS 42-
(d) %.2e

ANS 43-
(b) array

ANS 44-
(c) "hell"8

```
ANS 45-
(d) Garbage, 5

ANS 46-
(c) enum

ANS 47-
(c) 1

ANS 48-
(a) 101101101.1000110011
(b) 705.514
(c) 142C.1E
(d) 43.31
(e) 2152

ANS 49-
(a) 125.94
(b) 4789.914
(c) 482.90
(d) 44180.7695

ANS 50-
(a) 1101101101010110.1100110101
(b) 155526.6324
(c) 31231112.30311

ANS 51- (100111011.10001)2 ,
        (315.53125)10,
        (13B.88)16 ,
        (2230.2312003423)5

ANS 52-
(a) 16
(b) 8
(c) 5

ANS 53-
OUTPUT-
ERROR

ANS 54-
OUTPUT-
37.00
```

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ROLL N0.- 23