

## LAB I

2. //This program checks output using printf

```
#include <stdio.h>
int main()
{ printf("Good day!\n");           // a
  printf("Good /\ \ day!\n");      // b
  printf("He shared his \"wisdom\" with me\n"); // c
  printf("Hello\n    world!\n");   // d
  printf("Hello\vworld!\n");      // e
  printf("How    are    you?\n");  // f
  printf("I      am      OK.\n");  // g
  printf("How\tare\tyou?\n");      // g
  printf("I\tam\tOK.\n");          // g
  printf("How\tare\tyou?\nI\tam\tOK\n"); // h
  printf("Something has gone crazy\a\n"); //i
  printf("Bank interest is 10%% in the year 2001.\n"); //j
  return 0;
}
```

3. /\*This program produces a rectangle using printf\*/

```
#include <stdio.h>
int main()
{
  printf("    *****\n");
  printf("    *      *\n");
  printf("    *      *\n");
  printf("    *      *\n");
  printf("    *      *\n");
  printf("    *      *\n");
  printf("    *      *\n");
  printf("    *      *\n");
  printf("    *      *\n");
  printf("    *****\n");

  return 0;
}
```

4. /\*This program calculates the simple and compound interests\*/

```
#include <stdio.h>
#include <math.h>
#define RATE 0.035
int main()
{
  int year;
  double amount,income1,income2,income3,income4,income5,income6;
  char d;
  amount=500000;
  year = 10;

  income1=amount*RATE*year;
```

```

printf("Simple interest on Rs. %0.2lf in %d years =\
Rs. %0.2lf\n",amount,year,income1);

income2=amount*(pow(1+RATE,year)-1);
printf("Interest on Rs. %0.2lf in %d years compounded annually =\
Rs. %0.2lf\n",amount,year,income2);

income3=amount*(pow(1+RATE/2.0,2*year)-1);
printf("Interest on Rs. %0.2lf in %d years compounded semi-annually\
= Rs. %0.2lf\n",amount,year,income3);

income4=amount*(pow(1+RATE/4.0,4*year)-1);
printf("Interest on Rs. %0.2lf in %d years compounded\
quarterly = Rs. %0.2lf\n",amount,year,income4);

income5=amount*(pow(1+RATE/12.0,12*year)-1);
printf("Interest on Rs. %0.2lf in %d years compounded\
monthly = Rs. %0.2lf\n",amount,year,income5);

income6=amount*(pow(1+RATE/3.65e2,3.65e2*year)-1);
printf("Interest on Rs. %0.2lf in %d years compounded\
daily = Rs. %0.2lf\n",amount,year,income6);

return 0;
}

```

5. /\*This program converts cms to inch\*/

```

#include <stdio.h>
#define INCH_TO_CM 2.54
int main()
{
double inch,cm;

printf("Enter the distance in inches:");
scanf("%lf",&inch);

cm=inch*INCH_TO_CM;
printf("Distance %0.2lf inches is = %0.2lf cms\n",inch,cm);
return 0;
}

```

6. /\*This program swaps two values (assumed real here)\*/

```

#include <stdio.h>
int main()
{
double a,b,tmp;

printf("Enter two real values to be swapped:");
scanf("%lf%lf",&a,&b);

printf("Values entered are a=%lf and b=%lf\n",a,b);
tmp = a;

```

```
a=b;
b=tmp;
printf("Values after swap are a=%lf and b=%lf\n",a,b);

return 0;
}
```

7. //This program converts Farenheit temp to Centigrade temp

```
#include <stdio.h>
int main()
{
    double tempc,tempf;

    printf("Enter temp in Farenheit:");
    scanf("%lf",&tempf);
    tempc = 5*(tempf-32)/(double) 9;
    printf("Temp %0.2lf in Farenheit = %0.2lf Centigrade\n",tempf,tempc);

    return 0;
}
```