```
float div(float,int);
int main(void)
{
        int i,b;
        float a;
        float(*fp[])(float,int)={add,sub,mul,div};
        char *operation[]={"Add","Subtract","Multiply","Divide"};

        printf("Enter a float and a integer : " );
        scanf("%f%d",&a,&b);

        for(i=0;i<4;i++)
                printf("%s: %f\n",operation[i],(*fp[i])(a,b));
        return 0;
}
float add(float a,int b)
{
        return a+b;
}
float sub(float a,int b)
{
        return a-b;
}
float mul(float a,int b)
{
        return a*b;
}
float div(float a,int b)
{
        return a/b;
}
```

Function pointers are generally used in compilers, interpreters and database programs.

Here is a review of the pointer declarations used in this chapter-

```
int *p;          /*Pointer to int*/
int **p;         /*Pointer to pointer to int*/
int *p[20];      /*Array of 20 int pointers*/
int (*p)[20];    /*Pointer to an array of 20 integers*/
int *f(void);    /*Function that returns an int pointer*/
int (*fp)(void);         /*Pointer to a function, function returns int*/
int (*fp[4])(void);      /*An array of 4 pointers to functions, each function returns int*/
int *(*fp)(void);        /*Pointer to a function, function returns an int pointer*/
float *(*fp)(int,float);     /*Pointer to a function, function takes two arguments of int
                               and float type and returns a float pointer*/
float *(*fp[4])(int,float);  /*An array of 4 pointers to functions, each function takes two
                               arguments of int and float type and returns a float pointer*/
```

Exercise

Find the output of the following programs. Assume stdio.h is included in all programs.

1.
```
int main(void)
{
        int a=5,*ptr;
        ptr=&a;
        printf("Input a number : ");
        scanf("%d",ptr);        /*Suppose the input number is 16*/
        printf("%d %d\n",a,*ptr);
        return 0;
}
```