

## EXPERIMENT : 21

**Write a program to read a list at a time and write a list at a time using the well defined read & write function s**

Program:

```
# define a function to read a list from user input
```

```
def read_list():
```

```
    # read a line of user input and split it into a list
```

```
    input_str = input()
```

```
    lst = input_str.strip().split()
```

```
    # convert each element to its appropriate data type
```

```
    for i in range(len(lst)):
```

```
        try:
```

```
            lst[i] = int(lst[i])
```

```
        except ValueError:
```

```
            try:
```

```
                lst[i] = float(lst[i])
```

```
            except ValueError:
```

```
                pass
```

```
    return lst
```

```
# define a function to write a list to the console
```

```
def write_list(lst):
```

```
    # convert each element to a string and join them with spaces
```

```
    output_str = " ".join(str(x) for x in lst)
```

```
    # write the string to the console
```

```
    print(output_str)
```

```
# read a list from the user and write it back
```

```
lst = read_list()
```

```
write_list(lst)
```