Write a MIPS assembly program named 'basel.s' that contains two functions 'baself' and 'baseld' to computes  $\sum_{i=1}^{n} \frac{1}{i^2}$  for given values of n using floats or doubles respectively. IE: the C code for baself would be:

```
float baself(int n) {
    float ret = 0.0;

for (int i = 1; i <= n; i++) {
        float f = i;
        ret += 1.0 / (f*f);
    }

return ret;
}</pre>
```

- $\bullet$  *n* should be taken as input from the console.
- 'baseld' is the same code as above with 'float' replaced with 'double'.
- Make it simple to change the function being called (between 'baself' and 'baseld').