SECJ1013
PROGRAMMING TECHNIQUE 1
SECTION 2

ASSIGNMENT 1

LECTURER:

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GROUP MEMBER:

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```
                                    BMRM (age, weight,              BMRF (age, weight,
         Start                      height, gender)                 height, gender)
           │                              │                               │
           │                              ▼                               ▼
           ▼                        result = 88.362 +             result = 447.593 +
   Get age, height,                 (13.397*weight) +             (9.247*weight) +
   weight, gender  ◄──┐             (4.799*height) -              (3.098*height) -
           │          │             (5.677*age)                   (4.330*age)
           │          │                    │                             │
           ▼          │                    ▼                             ▼
      gender ==   No    result = BMRF      return result              return result
        male    ────►  (age, height,
           │            weight, gender)
          Yes                  │
           ▼                   │
    result = BMRM              │
    (age, height,             │
    weight, gender)           │
           │                   │
           ▼                   │
      Print result  ◄─────────┘
           │
           ▼
   Get optionRepeat
           │
           ▼
     optionRepeat
       == yes    ──── Yes
           │
          No
           ▼
         Stop
```

Start

Get age, height, weight, gender

gender == male

No

Yes

result = BMRF (age, height, weight, gender)

result = BMRM (age, height, weight, gender)

Print result

Get optionRepeat

optionRepeat == yes

Yes

No

Stop

BMRM (age, weight, height, gender)

result = 88.362 + (13.397*weight) + (4.799*height) - (5.677*age)

return result

BMRF (age, weight, height, gender)

result = 447.593 + (9.247*weight) + (3.098*height) - (4.330*age)

return result

```
Start
  │
  ▼
┌─────────────────┐
│   Get model     │◄─────────────────────────────────┐
└─────────────────┘                                   │
  │                                                   │
  ▼                                                   │
  ◇ model == Myvi ──true──────────┐                   │
  │ false                         │                   │
  ▼                               │                   │
  ◇ model == Alza ──true──────────┤                   │
  │ false                         │                   │
  ▼                               │                   │
  ◇ model == Axia ──true──────────┤                   │
  │ false                         │                   │
  ▼                               │                   │
  ◇ model == Bezza ──true─────────┤                   │
  │ false                         │                   │
  ▼                               │                   │
  ◇ model == AMZ ──true───────────┤                   │
  │ false                         │                   │
  ▼                               │                   │
  ◇ model == Ativa ──true─────────┤                   │
  │ false                         ▼                   │
  │              ┌────────────────────────────┐       │
  │              │ Get deposit , rate , period │       │
  │              └────────────────────────────┘       │
  │                         │                         │
  │                         ▼                         │
  │         ┌──────────────────────────────────┐      │
  │         │ MonthlyInstalment = calculation  │      │
  │         │ ( deposit, rate , period)        │      │
  │         └──────────────────────────────────┘      │
  │                         │                         │
  │                         ▼                         │
  │              ┌────────────────────────┐           │
  │              │ Print MonthlyInstalment │           │
  │              └────────────────────────┘           │
  │                         │                         │
  │                         ▼                         │
  │              ┌────────────────────┐               │
  │              │  Get optionRepeat  │               │
  │              └────────────────────┘               │
  │                         │                         │
  │                         ▼                         │
  │            ◇ optionRepeat == yes ──true───────────┘
  │                         │ false
  ▼                         ▼
 ┌──────────────────────────────┐
 │            Stop              │
 └──────────────────────────────┘
```

calculation (deposit, rate , period)
  │
  ▼
┌─────────────────┐
│ Get OTRPrice   │
└─────────────────┘
  │
  ▼
┌──────────────────────────┐
│ loan = OTRPrice - deposit │
└──────────────────────────┘
  │
  ▼
┌─────────────────────────────────┐
│ instalment = loan * (1+ rate / 100) │
└─────────────────────────────────┘
  │
  ▼
┌──────────────────────────────┐
│ monthly = instalment / period /12 │
└──────────────────────────────┘
  │
  ▼
return MonthlyInstalment